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SIGNIFICANCE OF PRE-1753 BOTANICAL EXPLORATIONS IN  
TEMPERATE NORTH AMERICA ON LINNAEUS' FIRST EDITION  
OF SPECIES PLANTARUM

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INTRODUCTION

When Carl Linnaeus published the first edition of *Species plantarum* in 1753 he discussed some 889 species of vascular plants from temperate North America, here defined as the present-day continental United States and Canada. The information relative to these plants came from the efforts of men and women who either visited the New World or who lived there and collected plants as amateur or professional naturalists.

In a few instances they were gentlemen correspondents of Linnaeus' or were men in Europe who never traveled but supplied Linnaeus with collections sent by others. A few were chance collectors, some gathered plants as a hobby, and others to gain political favors. Occasionally a collector was a person trained in medicine and used that knowledge to search for promising plants that might be used in the treatment of maladies. More often collectors were members of the clergy who collected potentially important horticultural plants for their gentlemen supporters in Europe. This led not only to the discovery of many important ornamental trees and shrubs, but many New World plants of agricultural import-

ance. The early Spanish explorators discovered a rich array of grains, fruits and vegetables that eventually found use in European culture and cuisine. The more notable were maize, potato, tomato, various squashes and of course a non-food plant, tobacco.

The early explorers who ventured into the New World were mainly interested in the riches of gold and silver. Even through natural history was of relatively minor concern, surprising numbers of books were published treating the native flora and fauna of the newly discovered lands. In 1526, Oviedo y Valdes published a book on the natural history of the West Indies based on his own observations in the Caribbean and Central America. Nicolas Monardes who never left Europe, published his book, in parts, on the natural history of the New World from 1569 to 1574. Both men were knowledgeable physicians and as such were particularly interested in medicinal plants and their local uses. Monardes' book was rewritten and published in Latin by Carolus Clusius in 1574. John Frampton translated that work into English and published it in 1577.

The exotic vegetation of the new lands across the ocean

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proved exciting to the European naturalists, and a source of considerable confusion. Species somewhat similar to those in Europe which proved to be useful were often considered to be the same species, even if they were not, so as to encourage their use in the medical trade. Plants which were the same, but were of no use or interest to the European physicians, were either ignored or taken to be a different species. It is well to remember that in the late 1500s, the concept of species was essentially that proposed by the ancient Greeks, chiefly Pliny, and the unique New World species were proving difficult to fit into Pliny's scheme of the vegetable kingdom.

Plants which were of potential economic importance were sometimes ignored or not used by the Europeans. Maize was not used extensively in Europe as a table food, and is even today largely considered an animal fodder. Potato was not considered fit for the tables of the aristocratic, and was shunted off to the slaves of the New World or the poor of Europe. For some economically important plants, tradition indicated they were poisonous such as was the case with the tomato up to the end of the last century. Some plants, because they were used by the "heathens", were considered unchristian for if God had intended christians to have such foods, they would be found in Europe!

Jose d'Acosta, a missionary, lived in Peru from 1569 to 1588. His notes originally were published in 1589 and then expanded into a four-volume work in 1590. These volumes were translated into French, Flemish and German around 1600, and then into English in 1604. His exact

observations are still a major source of information on the uses of plants by the native people of South America. d'Acosta, like Ovieda and Monardes, talked of maize, cassava and potato among other species. He also noted the heavy use of chili peppers, and reported that the Peruvian Indians were exceedingly fond of garlic which had been introduced into the New World by the Europeans. He called attention to the fine grapes in the New World, and introduced several kinds into Europe.

Collectors to temperate North America came only a few years after those that visited the more tropical regions. Early French explorers gathered plants and sent seeds and fruits back to France where they were soon flourishing in the gardens. Many of these species were gathered in what is today southeastern Canada. There was a desire on the part of the French to introduce plants not only of medicinal but of potential horticultural value as well. Many temperate conifers and hardwoods were ideally suited to the French climate and quickly were adopted, unlike the more tropical species.

By the start of the 17th century interest in plants was beginning to slowly move away from the rigidity of the Dark Ages and into a more enlightened period. The nearly 500 species of plants described by Dioscorides in his work on *materia medica* were destined to give way to over 6000 species in the works of the Bauhin brothers, and especially Gaspard Bauhin. They described several new species from the New World in 1623. The great philosophical barrier of Old World versus New World speciation had finally been broken, and with that restriction lifted, the urge to



search and discover new plants from all corners of the world began to be felt by botanists and explorers.

As the 17th century began some 50 species of North American plants were known from cultivation in European gardens. The concept of the botanical garden, begun in Venice in 1545, was rapidly becoming the fashion, and soon no medical school was complete without a rich and varied garden of medicinal plants. Botanical gardens were established in England and France by the start of the 1600s, and with them came the beginnings of a golden age of botanical exploration throughout the world.

### THE GARDEN CURIOSITIES

During the first half of the 17th century, botanical explorations in temperate North America were restricted to individuals who, from time to time, gathered seeds. Little concern was given to the preservation of dried voucher specimens, and almost none to recording the details of geographical location, plant association or similar information. John Tradescant the Younger came to Virginia in 1637 and collected plants along the York River. The purpose of his trip was to gather novelties for his natural history museum, known as Tradescant's Ark, which he and his father had established at Lambeth in London. Tradescant brought to England such species as the tulip tree, *Liriodendron tulipifera*, the red maple, *Acer rubrum*, sycamore, *Platanus occidentalis*, black walnut, *Juglans nigra*, and the bald cypress, *Taxodium distichum*. Although herbarium specimens of these species were not made in Virginia by Tradescant, various collectors in later years made voucher spec-

imens of John Tradescant's original introductions. These specimens are still extant and may be examined in the Sloane Herbarium at the British Museum (Natural History) in London. The museum specimens shown in Tradescant's Ark were eventually obtained by Elias Ashmole, and they became a part of the Ashmolean Museum, and are now a part of the University of Oxford Museum at Oxford, England.

To be sure the early discoveries of temperate North American plants were finding their way into the literature. As already mentioned, Gaspard Bauhin reported several in 1623. However, many were also described, illustrated and evaluated by herbalists. Maize and other New World plants were well known to European naturalists early in the 16th century, and a number of herbals contain illustrations of these species. The tradition of herbals was slowly being replaced by works of botany more concerned with the classification and identification of species, and less so with the medicinal uses of plants. Nonetheless, John Parkinson, the last of the English herbalist, was destined to describe several American species in his 1640 herbal, *Theatricum botanicum*. Plants reportedly found originally in Canada, New England and Virginia were included in Parkinson's book.

As for the Canadian references, Parkinson took most of his information from Jacques Philippe Cornuti's *Canadensium plantarum* published in 1635. This book described species of plants found in cultivation in and around Paris. A total of 68 species were described, but only 38 were from Canada or the New England area. Cornuti's book was the most scientific effort yet produced devoted to New

World botany, and nearly all of the 38 copper plate illustrations of Canadian plants executed by Cornuti were ultimately cited by Linnaeus when he wrote the first edition of *Species plantarum* in 1753. Linnaeus referred to Parkinson's book also, but much less frequently than Cornuti's.

Before leaving this period Thomas Hariot, friend and mentor of Sir Walter Raleigh, must be mentioned. Hariot came to Virginia in the 1580s and described what he found in a famous pamphlet published in 1588. Entitled "A briefe and true report of the new found land of Virginia", his remarks are valuable because of the detail he devotes to the forest resources and medicinal plants. He describes the native uses of grapes, beans, potatoes, melons, sunflowers, tobacco, and a wide variety of small grains including oats, barley and what he called wheat. Hariot reported on the several different kinds of acorns used by the Indians as well as walnuts, strawberries, mulberries and crab apples. Among the identifiable trees were species of oak, elm, ash, walnut, fir, juniper, maple, witch hazel, willow, beech, sassafras and pines. Hariot's report on Virginia -- which was also based on observations made in North Carolina -- was an exceedingly glowing one, and while not consulted by Linnaeus, it is of interest today for its early information on plant ecology and ethnology.

There were many other similar publications on the general aspects of the flora of temperate North America published by travelers prior to the 1680s. Most were in the vein of Hariot's. To Linnaeus they were of little or no interest. Even to contemporary naturalists they

were little more than descriptive catalogues of vague but wonderful species of plants which may or may not have much of a factual basis in reality. In many cases such publications were "flowery" so as to attract colonists to the New World. To the English, however, there was no question that great botanical treasures awaited discovery in the New World and that skilled and knowledgeable men were needed to survive the rigors of the new lands. The rapid growth of scientific organizations and thought in England and France was fomenting desires to explore, discover, and to answer questions about nature.

After the establishment of the Oxford Club in 1648, other scientific organizations were soon formed. Upon the final restoration of the Stuart monarchy in 1660, the Royal Society of London was established. This was, at least by modern standards, the first truly scientific organization in England. The first twenty years of the organization was a period of maturing and promoting scientific endeavors in various parts of the world, including the subtropical and tropical regions of the New World.

The growth of botanical gardens in Europe was significant during the last half of the 17th century. What initially had begun only as a desire of the nobility to possess exotic plants and animals from strange new lands soon escalated beyond the royal estates and gardens into the homes and estates of not only the more wealthy families of Europe, but even to the gardens of the common people. The exploration of the new lands across the sea, in Africa, the New World, and the Far East was creating new wealth. These new men of means were often



well educated, skilled in the arts, and were impressed by exotica acquired by of their fellows. They were also willing to associate with persons of ability, be they in art or literature, or persons trained as natural philosophers interested in the classification and identification of vascular plants. With the growth of botanical gardens, the craze for exotic garden plants increased, and friendships with knowledgeable botanists soon became paramount for nearly every gentlemen of means who wished to have a well-curated cabinet of natural objects. The classifiers and identifiers of plants suddenly became highly esteemed in the gentlemen's circle of close friends.

The Royal Society of London provided a common meeting place for scholars, noblemen and men of means. The union was perfect for land was needed for gardens, money and connections were needed to provide the means to obtain plants. What better a relationship to foster than that between the hopeful botanist, the newly established exporter of foreign curiosities, and the landed gentry who wished to have the exotics in their garden?

With the beginning of efforts to prepare a detailed review of the plants of the world, especially by English workers such as John Ray and Robert Morison, to say nothing of other workers in Europe, the need for more collectors in temperate North America grew. More and more members of the Royal Society began to call for an expedition to North America. Finally, it was decided to fund an expedition and a search was begun to find a suitable naturalist. The results produced John Banister.

## THE VIRGINIA BEGINNINGS

John Banister was born in 1650 and educated at Magdalen College at the University of Oxford where he received his B.A. in 1671 and his M.A. in 1674. He continued to serve the University after graduation, first as a clerk and then as a chaplain. At Oxford he met Dr. Robert Morison, the University's botany professor, and came to know the Bishop of London, Dr. Henry Compton, a noted gardener and botanical enthusiast. Under the guidance of these two men, Banister began to botanize and make collections of dried plants in the Oxford area. His skills soon manifested themselves, and Compton encouraged Banister to accept a ministerial position in Virginia. His duties included collecting objects of natural history while serving the needs of the Church of England.

Banister accepted the position and left for Virginia in 1678 under the sponsorship of a number of members of the Royal Society. William Byrd I of Virginia, served as treasurer of this group.

At first Banister stayed with Byrd at James River Falls and then at Westover, the Byrd estate. Not only did Banister send back to England a large number of seeds, fruits, dried specimens, and illustrations of native plants, he also received plants from England and plant them in Virginia. The European plants were coming from Jacob Bobart, the gardener at the University of Oxford, who, altogether with his father, served the University for over 60 years.

Financial support for Banister's efforts was never really substantial. His English patrons included such men as Dr. Hans Sloane, Dr. Henry

Compton, Dr. Martin Lister, Robert Morison, Jacob Bobart, George London, James Petiver and others, but none seemed capable of providing him with sufficient funding so that he could devote his full efforts to botanical explorations in Virginia.

In the 1680s, Banister entered into a lively correspondence with John Ray, and sent to him a large number of plant specimens. At the same time Banister was also providing specimens to a second major English botanist, Leonard Plukenet, Ray's rival. Ray took a catalogue of Virginia plants sent to him by Banister and published it in 1688 as an appendix to his second volume of *Historia plantarum*. Plukenet, on the other hand, took his Banister specimens, and in particular the Banister illustrations, and began to publish the figures in 1691, and a series of new scientific names (polynomials) in his first book, *Almagestum botanicum*, published in 1696.

To a degree Banister was depressed by these publishing activities. He himself began preparing manuscripts with the idea of publishing his findings under his own name. His previous attempts to publish his own works had failed for whenever he sent a manuscript to Europe, it was taken and published by others under their own name. Morison, Ray and Plukenet were all guilty of this, from time to time, but without their efforts to present the Virginian discoveries at once, others, especially workers in France and Holland, would have described the species anyway when they observed the uniqueness of the plants in their garden.

In spite of John Banister's difficulties, his fortunes changed somewhat when he

married a wealthy widow, and suddenly found a ready source of modest support. In addition, his station in Virginia was changing, and while still a minister, he accepted other duties and these often kept him out-of-doors collecting plants. Soon, the number of Virginia plants Banister sent to England surpassed 300 species, and was destined to reach about 340 species of vascular plants, 100 insects and about 20 mollusks before a rifle ball ended his life in an accidental shooting while he was out botanizing. The year was 1692, and his passing would close the opening period of temperate North American botany.

To Morison, Bobart, Ray and Plukenet, the collections of John Banister were the mainstay of their knowledge of temperate North American botany. Bobart took up the writing of Morison's *Plantarum historiae universalis oxoniensis* when Morison died in 1683, and began to describe and illustrate Banister species based on a combination of garden-grown material raised at Oxford and herbarium specimens. Banister's catalogue, which was published by Ray in 1688, was not illustrated, but Plukenet's books were illustrated. Unlike Bobart, however, Plukenet based his illustrations almost entirely upon herbarium specimens or figures executed by Banister which Plukenet obtained. Between these men, and others, notable Joseph Pitton de Tournefort in France and Paul Hermann of Leyden, Banister's plants were rapidly described and characterized.

Of perhaps even greater importance were the many species of vascular plants Banister introduced into western Europe. He left a legacy of exotic trees, shrubs and herbs



which generations of naturalists in the future would examine in even greater detail. Linnaeus would not only see and grow many of the Virginia species introduced into Europe by Banister, but would come to acknowledge Banister as an important collector of temperate North American species.

### THE BOTANY CLUB

The death of John Banister was a serious blow to English botany and its attempt to classify temperate North American plants and to obtain seeds and fruits to introduce such species into cultivation. The loss of Banister produced a significant gap in the active program of plant explorations in the British colonies of North America, and it was immediately agreed that a new person had to be found to replace him.

The Royal Society had been growing, expanding and changing over the three decades from its foundation in 1660 to 1690. A new generation of men were coming into power within the Society, and even within English society as well. Among the leaders of this new group was Hans Sloane. Sloane was a physician who had gone to the New World with the new Royal Governor of Jamaica, the Duke of Albemarle. He left England in September of 1687 and returned in late May of 1689 laden with several hundred new plants. Within a short period of time, Sloane increased significantly his knowledge of botany by studying with Tournefort and Magnol in France, and by working on his own collections. Sloane soon obtained a number of Royal appointments including physician to Her Majesty the Queen, and established a large and profitable practice. Sloane married a wealthy widow, whom he likely met in Jamaica,

and was soon in a position to devote much of his time to the gathering of curiosities from throughout the world. Sloane would also rise to power in the Royal Society, holding the important post of treasurer which saw to the publication of the *Philosophical Transactions*, the scientific journal of the Society. It was due to Sloane that the journal saw a significant rise in the number of papers dealing with botany. All in all, Sloane would live for 93 years, dying in 1753. In the years of his activities in the natural sciences, Sir Hans Sloane would obtain the largest collection of objects in the world, and because he lived so long, was able to obtain -- and thus save for future generations -- the volumes of herbarium specimens made by a majority of his contemporaries.

Others who rose to prominence during the 1690s were men who can be roughly divided into two groups: scientists and the supporters of scientists. The distinction is not absolute, as the life of Sir Hans Sloane witnesses. Foremost of the scientists was John Ray. His efforts during the 1680s to produce a two-volume work on the classification of all the plants of the world was, and still is, considered the finest produced of this period. Ray is best known for his flora of England which was the standard that Linnaeus had to overcome a half century later to win the critical support Linnaeus needed in England to carry his ideas of plant classification and nomenclature. Even so, the arrangement of plants proposed by Ray was still preferred by most English workers over Linnaeus' so-called "sexual" system. Today, many consider Ray to be the "Father of systematic botany". Close to Ray was Samuel Doody, Keeper

of the Chelsea Physic Garden, the medicinal garden of the Society of Apothecaries. A neighbor was Samuel Dale who would be an important intermediary between Ray and other English naturalists, and the men and women who collected plants in North America. Dale would amass a large collection of dried plants, and it would be to Dale that the Ray herbarium and library would go when Ray died. Ray was modestly but consistently supported by a number of gentlemen who were interested in botany. Most important was Charles Hatton, an aristocratic promoter, who funded many of Ray's publications.

In the opposing botanical camp were the followers of Leonard Plukenet. Plukenet, like Ray, was a professional botanist, and equally skilled in the art of systematic botany. Unlike Ray who was a man of ill health and abject poverty, Plukenet was at least healthy. His temperament was less conducive to good will, and the Society was badly divided into factions based on the supporters of Ray versus Plukenet. While Ray had a broad base of support, Plukenet's was largely restricted to the even more ill-tempered John Woodward. Woodward, who was even less well thought of by his contemporaries, was not as skilled as a naturalist as Plukenet, and he tended to be ignored by most of the membership of the Royal Society.

Some of the men of note involved in the promotion of botanical science in the Royal Society were James Ayrey, a Quaker merchant; Charles Du Bois, secretary of the East India Company; and Dr. Henry Compton. Compton is a special case. He was a major supporter of the Society's efforts to obtain plants, but as an avid gardener and the Bishop of

London, he was ideally positioned to make certain convenient appointments which benefited both systematic botany and his personal garden. In short, it was no accident that many naturalists that were sent into the field by the Royal Society were ministers for the Church of England.

Bordering both groups were two men. George London was initially the gardener for Henry Compton, but from the late 1690s to the early 1700s, he was gardener to William and Mary, and after her death, to William. As the Royal Gardener, London was ideally suited to ensure a proper place for the exotic plants coming into England from foreign lands. A skilled naturalist in his own right, London did much to foster the international exchange of seeds and bulbs, and to maintain some degree of cooperation between the various factions within the systematic community in London.

A second person is of considerable importance, especially in the history of the discovery of vascular plants in temperate North America. James Petiver was born in about 1663, and established an apothecary shop in London out of which he maintained a world wide correspondence with collectors of natural objects. Interested mainly in insects and shells, Petiver relied mainly upon ship's captains and surgeons, soldiers, naval officers, local physicians, assorted farmers, and even the bored wives of many gentlemen to collect curious plants and animals for him, and send them to London so that he might describe them in his own publications.

Petiver was not only a major promoter of the natural sciences to the amateur, he



often saw to it that their discoveries were rapidly published. Unlike most of his contemporaries, Petiver was willing to provide his correspondents with practical information includings sets of instructions on how to collect and preserve dried specimens, ship seeds and seedlings, and to record useful information to go with the collections. As an author, Petiver was respected. He was not of the stature of Ray, or even Plukenet, for his observations were often with little regards to what had already been published and he had a tendency to redescribe species others had already proposed. His pamphlets and articles are often filled with valuable historical information. As Petiver was receiving so much material from causal collectors, it is only by reading his publications that one can find who was collecting where at any one time in history.

All of these men were members of the Royal Society, but as a whole, the members of the Society were not devote to the subject of botany to the degree satisfactory to those who wished to concentrate on the plant kingdom. The stature of the Society was such that causal discussions were often difficult, and the mere matters of the day-to-day discussions of botanical nomenclature, the latest book on the mosses of England, or the problems of shipping seeds from China were not the type of heady matters one ought to present before the entire membership of the Society. Thus, those gentlemen interested in botany met informally at what must have been one of the first botanical societies in the world. It was known as the Temple Coffee House Botany Club.

Members of the Temple

Coffee House Botany Club met every Friday evening. There are no minutes of the meetings, for it was an informal gathering, but contemporary correspondence indicates that the membership consisted of such men as Sloane, London, Compton, Petiver, Doody, Dale, Ray, Plukenet, Woodward, and when in London, William Sherard and the younger Jacob Bobart of Oxford. From time to time field trips were taken, usually on Sundays, to gardens or places of botanical interest. In the relaxed comforts of the Temple Coffee House, the more detailed aspects of botany could be discussed and it was not unusual for members to bring recently acquired collections of exotic species for demonstration before the membership or to ask for help in establishing the correct scientific name.

It was here, no doubt, that the death of John Banister was discussed, and the need for a replacement reviewed. Compton likely proposed that he, as the Bishop of London and a proponent of the expansion of the Church of England in the New World, could find a position within a parish if the Society could find a naturalist willing to take vows. Funding support was likely discussed as well, and a group of supporters would be established and a treasurer appointed. It would be a duty of the treasure to secure a governmental post so that the colonial government would support the naturalist when he went about his collecting activities. Once the details were worked out, and the plans finalized, then the matter was brought before the membership of the Royal Society for approval. The system worked well.

It was William Byrd I who urged the Royal Society to

send a new collector to Virginia, and called for a search. This was initiated in 1693, but no one was found that was willing or qualified to fill the position. Funding was finally found in the form of a position from the Royal Governor of Maryland, Francis Nicholson, who had previously been Vice-Governor in Virginia. A strong supporter of the expansion of the Church of England, Nicholson's duties in the Catholic dominated colony of Maryland were to transform that colony to the Anglican faith. He moved the capitol from St. Marys to Annapolis, and saw, in the needs of the Royal Society, a means of adding another clergyman.

In late 1694, Edward Lhwyd, Keeper of the Ashmolean Museum at Oxford, wrote to Compton that he had a young man that might be qualified. Lhwyd indicated that he could train the young man in natural history, but it was up to Compton to provide training in the ways of the Church. The young man he spoke of was his deputy keeper, Hugh Jones.

#### BOTANY IN MARYLAND

Hugh Jones came to Oxford in 1694 on a pauper's scholarship. Born in Wales, he was probably only 24 when Lhwyd reported to Compton that he might be qualified. Over the course of 1695, Lhwyd provided Jones with a basic education in the natural sciences, and in December of that year was able to send him to London armed with glowing letters of introduction and instructions to take his religious vows. Over the course of the month, Jones was schooled on the matters of the Church of England, and in the end was ordained a priest and became a deacon. He was now ready to go to the New World and begin a new life in Maryland.

The Byrd resolution proposed and accepted by the Royal Society was to send a naturalist to Virginia. Funding, however, could not be found in that colony but was obtained from Maryland's governor. When Jones completed his training at the end of December, 1695, he set out for the coast from London to board a ship for the Chesapeake Bay, and the new capitol of Maryland, Annapolis. Rough weather made it impossible for the ship to depart for several weeks, and from time to time, Jones would travel back to London. He could not afford to stay long in the city, but apparently did visit the Temple Coffee House Botany Club where he fell into the Sloane circle of influence. It was James Petiver who took command of the Reverend Jones and began to educate him in the fine art of practical botany. Through him and other members of the Botany Club, Jones received instructions, various supplies, and an occasional piece of equipment. Most importantly were the personal contacts he made. From Petiver, Jones received a request that he should send to him insects and fossils; for Ayrey and Doody he should gather seeds and fruits; and for London and others he should make herbarium specimens. Petiver further urged that Jones should send everything to him for dispersal. He, in turn, would provide Jones with new publications in the field of natural history, help with his medical needs, and provide news about London.

When Jones' ship finally departed in the spring of 1696, Jones was as educated as could be expected. He eventually landed in Maryland, arriving in Calvert County in the heat of August and rode horseback to Annapolis -- a city of less than 40 buildings



and considerable mud -- where he resided with Governor Nicholson for five weeks.

The initial proposal was for Jones to serve as Nicholson's chaplain, but even before Jones left for Maryland, this proposal had been altered to allow Jones to assume duties in one of Maryland's parishes. After five weeks in Annapolis, Jones left for Christ Church Parish in southern Calvert County where he assumed the rectorship of one of Maryland's largest and most wealthy parishes.

During the summer and fall of 1696, Jones collected what he could, and continued to look for objects of interest for his London friends over the winter. In March of 1697, Jones sent letters and two boxes of specimens to Petiver in London. During the growing season of 1697, Jones searched among the meadows and woods near his church, along the edges of the Patuxent River, and the cliffs along the shore of the Chesapeake. He found a wide variety of herbs, shrubs and trees, assorted insects and butterflies, and fossils. Soon he had specimens of birds, small mammals and minerals to go along with the seeds and young plants we was sending to London.

What, no doubt, Jones sent in great expectation, and awaited in the same fashion, was not received with the same level of enthusiasm previously experienced by Petiver and others when a shipment from Banister arrived in the Old World. The seedlings were ill-packed and did not survive the sea voyage. The seeds were poorly labeled, the shells unsorted, the plant specimens small and fragmentary, and the insects broken or damaged. The animals were

poorly preserved and few could be adequately identified or even characterized. For the members of the Temple Coffee House Botany Club, the Reverend Hugh Jones was a profound disappointment.

For Jones, Maryland was not all one could wish for either. The winter of 1696-1697 was especially hard. He writes that snow came in November and remained until March, and at times the snow exceed two feet in depth. The Chesapeake Bay became frozen with ice so thick that sailors could walk to the shore from their ice-bound ships. The cold rains were hard on Jones and members of his parish. Still, for the young minister, his ministry was a challenge.

For Jones, as with most members of the Church of England in Maryland, the long history of Catholic rule represented the past and it was his duty to overcome the errors of religious views previously imposed upon the people. That Maryland had been settled as a Catholic colony was of no immediate importance to the Crown, the Royal Governor, or even the Reverend Hugh Jones. His directions were to conduct all services according to the dictates of the Church of England, no matter the local religious preferences in the community. Similarly, the obvious threat imposed by the growing number of Quakers coming southward from Pennsylvania was a matter of concern, and Jones was a signatory to a document demanding governmental control over the teachings of the Quakers. As a minister in Maryland's most wealthy parishes, Jones was well placed in the social fabric of the Colony. His yearly income was such that he was a wealthy man, that coming from a tax, in tobacco, levied by the sheriff for the minister. The

levy was based on the number of people in the parish, with each adult white man or woman equal to one share per person while any black slave, no matter the age or sex, was equal to two-thirds of a share. Good year or bad, the minister received his levy.

For Petiver the failings of Hugh Jones in Maryland to carry out his mandate to collect was particularly troublesome. As his strongest supporter in London, the plight of trying to collect, and survive in the New World, were understood by Petiver. Petiver stood to lose his own investment of time and energy if Jones failed, but it was clear even to the apothecary that the hopes for a significant improvement in Jones' abilities were ill-founded. Petiver himself expressed his disappointment when he reviewed his broken insects, yet he attempted to describe what he could. The bulk of Jones' Maryland plants went directly to James Ayrey and George London, and while Petiver received a few, these were not a significant part of his botanical holdings. However, in late 1697, George London gave to Petiver two large volumes of dried plants gathered in the New World, including a significant set of Jones' plants. Armed with these two volumes filled with Maryland plants, Petiver set at once to characterize them and to prepare an article for publication in the Philosophical Transactions.

To further this effort, Petiver wrote to Jones urging him to send all collections that he could immediately. In addition he told Jones of the disappointment his collection had caused in London and informed him of a move to sent others to the Colony. If Jones was to receive credit

for his work in Maryland, Petiver warned, he had to send his plant and animal collections before the end of 1698, for in that year, others would be collecting in Maryland.

At the November, 1697, meeting of the Royal Society, William Byrd II moved that the Society should find "a Fitt person" to be sent to "Virginia in order to make observations and Descriptions of all the Naturall productions of those parts and to write the History thereof." Although Byrd urged that the naturalist be sent to Virginia, the remaining part of his motion stated that for "such a fitt person the charge of his passage and 25 pounds per Ann. would be allowed him by the Governor of Maryland." Once again, Francis Nicholson offered to fund the collector, and the naturalist was to be in Maryland, not Virginia.

Nearly all of the necessary arrangements were completed at the Temple Coffee House Botany Club before the vote and William Vernon, a fellow of Peterhouse at Cambridge University, was determined to be that "fitt" person called for in Byrd's resolution. He was approved at the December meeting of the Royal Society, and set out for Maryland in January, 1698.

Vernon arrived in the Maryland in April and he began to collect almost immediately. Vernon's proposal was to remain in Maryland for three years, and to concentrate upon the bryophytes, lichens and similar non-vascular plants. He had received permission from the University to be gone from Cambridge with the proviso that he study botany, not marry, and report each year that he was alive!

The warnings sent to



Jones were heeded, and a large number of plant collections arrived in London in early 1698. Immediately Petiver set to work upon them, in concert with the Geogre London collections already in hand, but by this time Petiver was somewhat less concerned about his interests in Maryland for he had played a trump card in the form of Dr. David Krieg.

David Krieg was a Prussian friend of James Petiver's who had been living with him for much of 1697. Krieg had been illustrating many of Petiver's scientific papers during the year he was staying in London, and as a physican and skilled naturalists, Krieg was an ideal person to venture into the field. Petiver had been a party to Byrd's proposal to send Vernon to Maryland, but the opportunity to send another collector, especially one devoted to him, could not be passed by. During the conversations relative to Jones, Petiver must have convinced Krieg that he should go to Maryland as well. Krieg could not obtain support from the Royal Society, or even Francis Nicholson, so it was necessary for him to find a position as a ship's surgeon. This accomplished, Krieg departed in March of 1698, nearly two months after Vernon, and arrived in April just before Vernon.

Krieg's close and personal friendship with Petiver is well known, and their letters of affection continued well after their year together at Petiver's home in 1697. Perhaps as a part of that relationship, Petiver gave to Krieg a young man named Issac who was to assist Krieg with his explorations. Upon his departure for the New World, Petiver presented Issac with a rather famous set of instructions:

When ever you goe ashore take with you a Quire of Brown Paper or Collection Book. An Insect Box, Pins & a small Viall halfe fil'd with Spirit in which you drown all your supernumery Flies, Beetles, Catterpillars, & other Insects especially such you find in water. Also a Booke for Butterflies & Moths of each wch get al you can find, with a paper bag or two to put all ripe seed, ffruit & berries as also all ye shells you meet with both land & water & as many of each sort as you can find; such as are thin & brittle you must put into a Pocket by themselves with moss or any soft leaves to keep them from breaking.

These instructions were exact and perhaps a bit overbearing, especially if Issac had actually carried them out fully to the letter. As fate would have it, Issac was never allowed to leave the ship, and thus was of no value to Krieg as an assistant.

Petiver was not the only one trying to get a personal collector into Maryland. John Woodward -- the vowed enemy of Sloane and Petiver -- and his botanical associate, Plukenet, also wanted material from Maryland. At first, apparently, Woodward and Plukenet did not receive Jones material, and were not slated to receive Vernon collections either. Fearful of this, John Woodward apparently wrote to the Royal Governor, Francis Nicholson, and complain of Sloane and others in London. He implied that there were collectors in Maryland who were taking objects of nature without his permission, and that such person -- Jones, Krieg and Vernon -- were associated with such

"Rogues and Rascalls" as Sloane, Ray and Petiver. This correspondence must not have greatly impressed Nicholson for he knew of Woodward from others. Still, Petiver was concerned and in his letters urged Jones to send Woodward specimens which, apparently, Jones did. Vernon wrote Sloane from Maryland that although Woodward had claimed over 100 correspondents in America, he had met none and suspected Woodward's honesty. Vernon ended his commentary on Woodward by calling him "an abominable Villanous & Silly fellow".

The Reverend Hugh Jones knew that Krieg and Vernon were coming, and both men carried letters of introduction from Petiver. It is likely that all three men met each other in Maryland. It is certain that Krieg and Vernon collected jointly, and likely traveled together on a few occasions.

The collecting activities of Krieg and Vernon were limited to the coastal plain of Maryland, and an examination of their extant collections clearly shows that Krieg was able to collect plants more early in the year than Vernon. This was of little initial concern to Vernon as he was planning to stay in the Colony for three years. In July of 1698, Vernon wrote to Sloane that he was having to return to London. This was most likely because he had learned that Francis Nicholson had been appointed Royal Governor to Virginia, and would shortly leave Maryland. Without Governor Nicholson to support his position, Vernon would have to depart. Krieg, who planned to spend only the growing season in Maryland, collected more rapidly, gathering plants, insects, birds and mammals, fossils, shells and assorted

other items of natural curiosity. In October of 1698, Krieg and Vernon departed the Royal Colony of Maryland and arrived together in England less than two months later.

Almost immediately the collections of Krieg and Vernon were divided into sets and sent out to the supporters of Vernon, with duplicates of the Krieg collections going to many of the same people as well. Sloane received a large set of these collections, and these, in turn, were sent to John Ray for naming. Ray was in the process of completing a supplement to his *Historia plantarum*, and the new Maryland collections would prove a valuable addition to the world's flora. Krieg specimens went to Plukenet, probably through Petiver, and Petiver provided Sloane with additional material which was not sent to Ray. Duplicates were accepted by Ayrey from both Krieg and Vernon, and Sloane received a set of Vernon specimens directly from the collector. Some material was sent to William Sherard at Oxford. Seeds and fruits were distributed among the various growers, and soon Maryland plants were flourishing in English gardens.

#### BOOKS AND ARTICLES

The first of the major papers dealing with the natural history of Maryland was published by James Petiver. It appeared as an article in the last 1698 issue of *Philosophical Transactions* and was a catalogue of the plants and animals found in Maryland by Hugh Jones. In all 54 vascular plants were reported by Petiver. The majority were species previously known to naturalists and had been found in Virginia by Banister and other naturalists. A few were considered to be new species



by Petiver, and described as such. None of the species was illustrated.

A small collection of plants had been gathered in Maryland prior to the arrival of Hugh Jones in 1696. A few species from the Colony were described by Plukenet in 1696, and one was illustrated as early as 1691 in *Phytographia*, his book of illustrations. It is unclear who might have gathered these plants and when. A possible candidate is a ship's surgeon and later correspondent of James Petiver, Dr. John Smart. He gathered plants in Maryland in 1708. He is best known for his plants collection from the Hudson Bay region of Canada which he obtained in 1708. These specimens are found in the Petiver and Plukenet volumes of dried plants in the Sloane Herbarium.

In 1700 Plukenet published a second volume devoted to botany. His 1696 book, *Almagestum botanicum*, had been well received but was criticized as incomplete as a world flora. This was indeed true, and a supplement, *Almagesti botanici mantissa* was released in 1700. The *Mantissa* contained the description of over 200 species of Maryland plants, and several were illustrated in the *Phytographia* section included with the *Mantissa*. Most of the Maryland plants reported by Plukenet were those gathered by Jones and Krieg. A new book, *Amalthaeum botanicum*, was published in 1705 by Plukenet. In that year only 16 Maryland species were described, but numerous plants previously described from the Colony were illustrated in 1705.

John Ray published a supplement to his two-volume *Historie plantarum* in 1704. Called the *Supplementum*, Ray ac-

counted for over 400 polynomials applied to Maryland plants. In addition to new species proposed by Ray, he listed, sometimes in synonymy, sometimes with comments, all previously published names which had been applied to Maryland plants by Petiver and Plukenet. William Sherard, and perhaps Jacob Bobart, described a small number of Maryland plants which Ray published in his *Supplementum*. Ray also published an index to James Petiver's herbarium in the *Supplementum*, and this contained descriptions of a few new species from Maryland.

From 1699 to 1702, Petiver added other new species of Maryland plants to the literature. These appeared in a series of pamphlets published by him, and many of the species were illustrated.

In addition to the Maryland plants reported in the published works of Plukenet, Petiver and Ray, these authors published new species from other regions of temperate North America as well. The majority came from Virginia, but a growing number of new collections were coming to Europe from the Carolinas and from the New England area. Unlike Banister and Vernon, who were professional naturalists in the sense that their positions were supported by the Royal Society, collections from other areas were being gathered by amateurs. Most of these people were ship's captains or surgeon, local residents, or the occasional visitor. None was destined to become a major supplier of plants to European gardens, however, and their impact upon the history of systematic botany is exceedingly limited.

Botanical explorations essentially ended in Maryland with the departure of Krieg

and Vernon in October of 1698. Jones remained in Maryland and continued to serve his parish. He gathered specimens in 1699, but by 1700 the effects of tuberculosis were beginning to sap his strength. His letters became less frequent and were more often filled with indications of his declining health. Finally, in January of 1702, Hugh Jones, minister and naturalist died. He was probably 31 years of age.

The failure of Jones, Krieg and Vernon in Maryland was a serious blow to the men of the Royal Society, and especially the members of the Temple Coffee House Botany Club. To be sure others were collecting along the eastern seaboard of North America, and James Petiver continued to receive specimens from a large number of persons from New England to Georgia. Several people were in Virginia and the Carolinas collecting specimens which Petiver would describe. Yet, death was taking its toll even of the membership of the Botany Club. Ray died in 1705 and Plukenet followed in 1706. Petiver himself would pass away in 1718, but by this time, Vernon and Krieg had both died.

Botany itself was changing. The desire to have exotic plants had not lessened in any fashion, but new and more exciting species were coming from the subtropical and tropical regions of the world. The growing diversity of flowering trees and shrubs from China and Japan entering Europe was proving to be far more exciting than similar species from temperate North America. Likewise, the succulent species being found in southern Africa were suddenly attracting a large number of enthusiasts, to say nothing of the bulbous species native to northern Africa and parts of

the Middle East. Horticultural interests in temperate North America were waning.

The nomenclatural confusion was rapidly getting out of hand, and the lack of systematic order and a useful classification scheme -- in spite of Ray and Tournefort -- was causing great difficulties in attempting to classify the hoards of species coming to Europe from foreign lands. Publication costs were rapidly escalating so rapidly that publishing became difficult. The idea of the "genus" had been established by Tournefort, who died in 1708, and Ray had proposed groups of genera which we would today call families, but it would remain for the Jussieu family of Paris to complete these ideas, and that would be after 1753. Botanical exploration continued in temperate North America, and many unique species became known in Europe. A twenty year period of neglect would exist from 1700 until 1720 although a review of extant herbaria collections in Europe reveals a period of considerable activity. Without these discoveries being published, however, their existence was not known and it would remain for others to complete the task of describing the native flora of temperate eastern North America.

### THE CATESBY YEARS

Mark Catesby is perhaps the best known of the American naturalists. Born and educated at Essex, Catesby found that he had an early interest in the natural sciences due to his close friendship with Samuel Dale, the long-time friend of John Ray. Dale, the Brain-tree apothecary, was the author of the widely used *Pharmacologia* and had acquired a fine herbarium over years of plant collecting. He received



many specimens through his association with the Temple Coffee House Botany Club. With Dale's encouragement, but limited support, Catesby went to Virginia in 1712 to pursue a career as a naturalist. He went to live with his sister, Elizabeth, who had married Dr. William Cocke, an Englishman who had migrated to Virginia in 1710. A friend of the Royal Governor and the Byrd family, these associations proved to be exceedingly useful to Catesby, and he took full advantage of them. Within a week of his arriving in Virginia, Catesby met William Byrd II. Catesby spent a part of the summer and fall of 1712 at Westover, the Byrd estate, and gathered plants in the area where John Banister had roamed 20 years before.

Encouraged by his friendship with Byrd, Catesby began to collect everything he could find. Within a year Governor Spotswood sent to Henry Compton a large consignment of seeds collected by Catesby along with a number of herbarium specimens. The specimens went to Dale, and he informed the members of the Temple Coffee House Botany Club of the many interesting and finely collected plants he was receiving from Catesby. By 1715 James Petiver was writing to Catesby and asking the young naturalist to send him specimens.

When Catesby returned to England in 1719, he brought with him a large collection of vascular plants which he gave to Dale. Dale shared the Catesby material with William Sherard at Oxford who, from 1703 to 1717, had been consul at Smyrna, a city-state in Turkey. Sherard had been working on a revision of Bauhin's *Pinax* and had much of it completed prior to 1703. He had urged Tournefort to complete

the task when he assumed his diplomatic post, but as Tournefort died in 1708, the revision remained undone. With the arrival of Catesby collections from Virginia, coupled with the large number of species described since 1703, Sherard once again turned his attention to the *Pinax* revision.

An aspect that certainly aided Sherard in this matter was the annotations Sherard found on the Catesby specimens. Dale had attempted to keep up with the synonymy of his day, and many of Catesby's specimens he had been able not only to identify but assign synonymies as well. Nonetheless, fully half of what Mark Catesby brought with him was new.

Catesby was certainly in the mold of Banister. He made careful notes and field sketches -- which may still be examined today on his specimens -- and knew what had been gathered in Virginia previously as well. Catesby knew that the coastal plain had been well collected, not only by Banister and others who had been in Virginia, but Jones, Krieg and Vernon in Maryland. He proceeded to work further inland, and even went into the mountains.

Upon his return to England in 1719, Catesby was well known, but only to Dale, Petiver and a few other members of the Royal Society. Through a series of well placed letters with rather blunt hints, and a careful distribution of herbarium specimens, Dale managed to impress critical members of the Society with the value of Mark Catesby as a collector. Within a few months, the Society was discussing the idea of sending Catesby back to the New World. As before it was necessary to find a position,

and to arrange for a group of supporters.

The Society had worked closely with Francis Nicholson in the past, and once again the members turned to him for help. Nicholson was now the Royal Governor to South Carolina, having been appointed to that post in 1720. In October Nicholson informed the Society that he would permit Catesby to come to the Colony and would provide him with an annual sum of 20 pounds per year.

The history of botanical explorations in the Carolinas prior to the time Mark Catesby arrived was one marked with the occasional visitor and residents interested in natural philosophies. Even so South Carolina contributed little compared to Virginia prior to 1720, and North Carolina was even less significant during that period of time. Various people gathered plants in the Carolinas with the help of James Petiver. Robert Stevens, who lived near Charles Town, sent plants and animals to Petiver starting in 1698. From the same area Edmund Bohun and Robert Ellis sent more plants to Petiver, and these were described by Petiver, and Plukenet, prior to 1705. A British sea captain, William Halsted, also gathered plants from 1699 to 1703. The collections of Bohun and Ellis led to many significant additions to Petiver's volumes of dried plants.

One of the first women to actively collect in temperate North America was Hannah Williams of South Carolina. She sent a large collection of butterflies to Petiver in 1701 followed by a few plant specimens by 1705. These collections would have been more significant had they been published, but only a few ever

saw the printed page, and most were lost to the botanical community when Petiver died in 1718.

One of the finest collections of Carolina plants ever received from the Carolinas prior to 1720 was made by the Reverend Joseph Lord. American by birth and educated at Harvard University, Lord was well known to the small circle of New England scientists active in that area before he went to South Carolina in 1695. He settled in Dorchester on the banks of the Ashley River, and under the guidance of Hannah Williams, began to collect plants in 1701. Lord's large and well preserved specimens are readily noted in Petiver's extant volumes of plant specimens because of their elegantly hand written labels.

Lord wrote yearly to Petiver and sent him specimens with nearly every letter until 1711. Many of Lord's collections were described by Petiver in his *Gazophylacii naturae & artis*, a series of pamphlets that were published from 1702 to 1709. In 1712, Petiver described a few of Lord's fern species in his *Pterigraphia americana*.

Another of James Petiver's Carolina correspondents was John Lawson. An apprentice in the London Society of Apothecaries before he went to North Carolina in 1701, Lawson was knowledgeable in the art of collecting plants and securing information on the medicinal significance of exotic plant species. Although there was some initial correspondence between Lawson and Petiver in 1701, there was no major exchange until 1709 when Lawson published his own account of the natural history of North Carolina. This book was mainly an overview of the natural



history, topography and geology of the Colony, and although he traveled widely he seems to have made only a few collections prior to 1709. Lawson met Petiver when he was in London shortly before his book was published. He was the Surveyor General of the Colony, in a position to explore, and both Petiver and George London encouraged him to send them specimens and seeds. A gift of several books and assorted items necessary to gather animals, insects and plants helped to solidify their relationship. During Lawson's surveying of the Virginia and North Carolina boundary, he was able to gather many specimens and to enrich Petiver's holdings of plants, insects, snakes, birds and fossils. In 1711 Lawson was hoping to collect extensively and wrote Petiver of his plans. Unfortunately he was captured by Tuscarora Indians who were displeased with his attitude toward them and killed him. His last book of plants had been sent to Petiver but two months prior to his death in September of 1711.

John Lawson's *A new voyage to Carolina* proved to be a successful publication and greatly strengthened his place in history. Unfortunately this travel account does not contain information on the plants of the Colony in a form useful to subsequent generations of taxonomists and he was destined to play no role in the future of systematic botany.

When Catesby came to the New World in May of 1722, he was already well known for his knowledge of plants and animals. The community of Charles Town, South Carolina, was one place where naturalists were considered an asset.

Catesby left London well sponsored with the financial support of not only the Royal Governor but that of four noble peers of the realm and a number of English gentlemen naturalists, notably Sloane, Dale, William Sherard and Mr. Charles Du Bois, the secretary to the East India Company. His efforts were sanctioned by the Royal Society and carried out with the unofficial but nonetheless important approval of the Temple Coffee House Botany Club. As he had done in Virginia, Catesby quickly established himself in the best of social circles in Charles Town, and became an influential member of the Colony.

Catesby traveled widely in the Carolinas, visiting both North and South Carolina, portions of Georgia, and even northern Florida. He went westward as far as the Piedmont. In the winters he often went to Bermuda and Bahama collecting and illustrating the plants he encountered. He gathered many different kinds of seeds and fruits which he sent to England, and these were rapidly incorporated into the gardens of western Europe. He gathered all objects of nature he could find -- animals of all kinds, fossils, plants of nearly every type -- and managed to make notes on geology, anthropology and ecology. Pleased with his efforts in the Carolinas, he attempted to encourage his London supporters to finance an expedition to Mexico, but this proved impossible. When the term of Francis Nicholson ended in 1725, Catesby traveled to Bermuda where he spent nearly a year, and then, in 1726, continued on to England.

Upon his return to London, Catesby immediately set to the task of publishing his *New World discoveries*. He

proposed to his supporters that he begin to prepare a volume on the natural history of the areas he had visited. Unfortunately for Catesby, his supporters in London were no longer willing to provide him with the means to pursue his goal, now that he was not providing them with specimens, and he was forced to find other means. Faced with this problem, Catesby learned to etch his own copper plates for the proposed colored illustrations which he then had to paint himself. He found work in various nurseries where he was able to observe many of his own species growing in cultivation and was able to adjust his illustrations and descriptions accordingly. With a no-interest loan from Peter Collinson, Catesby was able to proceed and finally release, in parts, his *Natural history of Carolina, Florida, and the Bahama Islands*.

Initially, William Sherard at Oxford assisted Catesby in the preparation of his text, and especially with the complex nomenclature. Given that many of Catesby's American plants had previously been described based on Virginia, Maryland and New England collections, Sherard's knowledge of these plants was valuable.

Catesby's close relationship with Sherard caused him some minor difficulties in his friendship with Sir Hans Sloane. While Catesby had been in the New World collecting for his English patrons, they had been warring among themselves over his material. This battling was most fiercely waged between Sloane and Sherard. To a large degree this was only a manifestation of their longer and more serious disagreement over the access Sherard requested of the many collections of plants Sloane had acquired. In parti-

cular, Sherard wanted access to the collections formerly owned by James Petiver. Sherard's work on his revision of Bauhin's *Pinax* had been delayed by his inability to thoroughly study Petiver's many collections. By the early 1720s, this became a major source of difference between the two men.

In 1721, Sherard asked a German botanist, John Jacob Dillenius, to come to England and assist him in completing the *Pinax* project. Sherard lived in London at the time, and had asked Sloane on numerous occasions to be allowed to review the Petiver collections so he could complete his revision. Sloane initially refused saying that the Petiver material was too disorganized and as soon as he had it in order Sherard could see it. When Sherard finally did get an opportunity to examine Petiver's collections, he complained that Sloane had so ill treated them that they were essentially useless. Their dispute over access to the Petiver collections continued for years, and when Sherard died in 1728, the feelings of ill-will were passed -- in a less intensive form -- to Dillenius.

Dillenius did what he could with the Petiver polynomials, and other scientific names proposed by Plukenet (Sloane had his collections as well) and others. By using the herbarium at Oxford, and the expertise of Dillenius, Catesby was able to associate his material with species previously described by Ray, Plukenet, Petiver and others. This was aided by Samuel Dale's own annotations of Catesby specimens that had come to England while Catesby was still exploring. As a result, Dale, who had Ray's personal herbarium, had been able to



accurately name many of Catesby's specimens based on his own knowledge of the Virginia and Maryland flora for he had duplicates of many of those species in his own herbarium.

By the spring of 1729 Catesby had completed the first portion of his book and began to release it as sets of numbered plates with the idea that the book be assembled later when it was completed. He presented each set of plates to the Royal Society, and by November of 1732 had given the Society all the parts that constituted the first volume. It was Collinson who finally presented Catesby to the Society for membership which was granted in May of 1733.

Parts for the second volume began to appear in January of 1735, and Catesby continued to give each part to the Royal Society until all parts were completed in December of 1743. In 1747 he published an appendix and Collinson was able to write to Linnaeus that Catesby's book was completed. By this time the number of contributors to Catesby's project had grown to 166, well above the original 12 men who had provided him with his initial funding. Included among his large list of patrons were a number of royal families, ambassadors, botanical friends and colleagues. Perhaps most significant was the number of supporters from the American colonies. The final book contained 200 colored plates of which 171 plants were figured.

Catesby's three-year effort in South Carolina has come to be regarded as one of the most significant in American natural history explorations. He has come to be regarded as one of the more skilled observer. Catesby was

only an adequate illustrator, but the combination of his art work and his ability to observe plants and animals has been appreciated by many since 1747, including Linnaeus.

### THE LINNAEAN ERA

For temperate North American botany, the Linnaean era began when Carl Linnaeus came to England. He came to examine the collections of dried plants that had been gathered in the New World by the host of collectors starting with John Banister and essentially ending with Mark Catesby. For Linnaeus, Catesby's work was highly significant. The full text of volume one and much of the second had been printed when Linnaeus visited Dillenius in August of 1736. At Oxford, Linnaeus could not only examine the plates, but the actual specimens as well for Sherard and Dillenius had received nearly a full set of Catesby's specimens. In addition, Linnaeus could examine collections made by earlier naturalists, now annotated by Sherard and Dillenius with the polynomials proposed by various workers up to the mid-1730s. Previously in Sweden, Holland and France Linnaeus had been able to see garden material, and had been able to characterize many of the New World species on the basis of these plants. He continued to examine garden material, including the botanical garden at Oxford, but it was his examination of herbarium material that proved critical to his understanding of the application of polynomials.

Linnaeus' visit to England made it possible for him not only to see many collections which he had been unable to study previously, but also gave him an opportunity to talk with many of the men who had been supporting

explorations throughout the world. He visited Sir Hans Sloane briefly but did not examine his herbarium. He formed a bond with Peter Collinson and James Ellis which was to carry him through the difficult period of acceptance of the Linnaean methodology in England after 1753.

While Linnaeus certainly concentrated upon the collections made by Catesby and others who collected in the southern portion of the eastern seaboard, he did see a few collections made by collectors from the New England area and eastern Canada. Botanical explorations had been occurring in the north while similar activities were being carried out in the south. John Josselyn was one of the first naturalists to visit this area, traveling to the present state of Maine in 1638 and 1639. On this trip he had little time to observe plants and animals, but on a much longer trip, lasting from 1663 to 1671, Josselyn had ample opportunity to make observations. He was primarily interested in medicinal plants of the area, and discovered that the herbals of his day were inadequate in dealing with the New England vegetation. He made no permanent collections and apparently failed to gather seeds of the plants he saw. Nonetheless, Josselyn prepared a small book with rather crude and poorly executed illustrations of the New England flora. Entitled *New-England's rarities discovered*, his book was published in 1672; it proved to be of little interest to Linnaeus and it is not mentioned in *Species plantarum*.

Other collectors came to the New England area, but few were of major importance. Thomas More, the so-called "Pilgrim Botanist", came to New England in 1722 and stayed

until 1724. When five Mohawk chiefs were sent to England in 1709, More apparently met them and received an invitation to visit them in the New World. He had worked with Bobart at Oxford in the 1690s, and had collected for Lhwyd in southwestern England in the 1700s. He was an enthusiastic collector, and Petiver, Sloane and others encouraged him to go to America. It was Sherard who secured the funds for More to travel, but had some difficulties in finding supporters for a man in his 40s.

More proved not to be as successful a collector as William Sherard and his supporters had hoped. Nonetheless More's many collections were in the Sherardian Herbarium at Oxford University when Linnaeus visited it in 1736. So too were the Hudsons Bay collections of Richard Tilden who had visited the area in about 1700. These collections were likely the only plants from northern Canada that Linnaeus examined in the herbarium.

No doubt Linnaeus and Dillenius, who initially began their association with a profound distrust of the other, discussed Dillenius' book *Hortus elthamensis* which had been published in 1732. Dillenius had discussed nearly 400 species grown in the garden of James Sherard, the brother of William Sherard. Dillenius had served Sherard up to his death in 1728 with a high degree of devotion, and hoped to complete the revision of the *Pinax* which Sherard had so long struggled to see done. Shortly after William's death, James asked Dillenius to prepare a book on his garden. Dillenius, the first Sherardian Professor at Oxford, was reluctant to do it, but bowed to the will of the wealthy James and devoted several years to the book. The *Hortus*



was well illustrated and well written with abundant information on the distribution and taxonomy of each species mentioned. It was a major work and Linnaeus recognized it as such almost immediately. At Oxford, Linnaeus was able to review both the garden and herbarium specimens Dillenius had used in arriving at his taxonomic disposition of the species he treated. Included in the Hortus were a number of Banister and Catesby species as well as a few grown from seed gathered in Maryland. The synonymy was rather complete, and Linnaeus could examine the herbarium specimens annotated by Sherard, Dale, Dillenius, and even Ray, Plukenet and Petiver, and trace the evolution of the species definitions Dillenius had arrived at. Linnaeus remained at Oxford for some eight days. It was here he studied the extant collections of American plants which aided him when he assisted Johann Friedrich Gronovius during the winter of 1737-1738 in classifying a large collection of plants from Virginia gathered by John Clayton.

#### CLAYTON AND KALM

Colonial Virginia of John Clayton's era was different from that Mark Catesby had found in 1712. The population was growing and the urban centers, once restricted to the Williamsburg area, had expanded far beyond the James River. There was a college, William and Maryland, newspapers in the Colony -- something that was not even yet in the city of Oxford in England. The intellectual center that had once been Williamsburg was now divided between Boston, Philadelphia and Charles Town. Virginia still held great families, and most were deeply interested in botany and the other natural philosophies.

Some maintained large gardens and were exchanging plants not only with European centers, but even with other colonists elsewhere in the New World.

Clayton came to Virginia in 1720, joining his father who was in the government and would eventually rise to be the Attorney General. Clayton acquired land and became an established, although modest, man of means. He too became a government official serving as the Clerk of Gloucester County where he lived. Like other Virginians, Clayton established a garden and entered into a correspondence with William Byrd II, Mark Catesby who he had met, Peter Collinson, and John Bartram. It was Catesby that sent Clayton's herbarium specimens to Gronovius, and others, and urged Gronovius to carefully review them with the hopes of classifying them.

In the 1730s Clayton prepared a manuscript entitled "A catalogue of plants, fruits, and trees native to Virginia" and sent it to Gronovius. Taking the manuscript, and the many Clayton specimens which had been gathered since the early 1730s, Gronovius and Linnaeus began to prepare a manuscript on the collection following Linnaeus' new system of classification rather than that of Ray's which Clayton had followed. Linnaeus worked closely with Gronovius on the nomenclature of the Virginia species he was publishing. The knowledge Linnaeus had gained from his visit to Oxford where he examined so many of the temperate North American plants proved to be useful to him in naming the plants gathered by John Clayton and assigning synonymies to them. The resulting book, *Flora virginica*, appeared in two parts. The first part was published in 1739, while the second was released in 1743. Linnaeus

was closely involved with the 1739 volume, but had little direct influence on the 1743 volume.

When Clayton saw Gronovius' *Flora virginica*, he was profoundly disappointed. Not only had Gronovius not followed his manuscript, he failed to acknowledge Clayton's contribution to the *Flora* except for a minor comment in the introduction. To remove this as a possibility from happening again, Clayton began to study the Linnaean methodology with the hopes of writing his own flora of Virginia. Within a few years he was able to write his fellow naturalists commenting on various technical points in their descriptions, and he turned his attention to writing. In 1748, Clayton traveled into the high mountains collecting many new species which were as yet unknown to Linnaeus. In 1757, Clayton sent to Peter Collinson his revision of *Flora virginica*, but could not find a publisher. Collinson asked George Ehret to prepare plates for the volume, and some were actually prepared before Laurenz Gronovius, the son of Johann, published his father's long delayed second edition in 1762. The book forced Clayton and Collinson to abandon their project, and Clayton's revision was never published.

Clayton had proposed to use Linnaeus' binomial system of nomenclature, and this plus the Ehret plate would have made his flora a major publication. The younger Gronovius did not illustrate his work, nor did he use binomial nomenclature, and thus this post-1753 flora is of no systematic importance and is little used today.

A causal friend of John Clayton's was John Mitchell, a man of many talents and broad

scientific interests. He was in Virginia from 1735 to 1746, returning to England because of his ill health. He also maintained a large and active correspondence with many contemporary scientists including botanists such as Dillenius, Gronovius and Linnaeus. He knew John Bartram as well and communicated with Cadwallader Colden in New York, Peter Collinson in London, and even two of his fellow American collectors, Mark Catesby and Peter Kalm.

Mitchell's interests in botany were somewhat limited compared to his contributions made in other areas of the natural and physical sciences. Nonetheless he sent numerous herbarium specimens to Dillenius and Collinson, along with various manuscripts. One of those papers was published for him by Collinson in 1748; it was titled "*Nova genera plantarum Virginiensum*." This work was consulted by Linnaeus and various of Mitchell's new genera were mentioned or treated in the first edition of *Species plantarum*.

Of perhaps greater interest were Mitchell's comments regarding species and speciation. He proposed that plants and animals that can produce offsprings biologically ought to be considered members of the same species, whereas those that cannot produce offsprings or the off-spring are sterile, ought not to be regarded as the same species. Mitchell felt Linnaeus' artificial system was unreliable, and that Ray's system was much more natural as it was based on attributes of the whole plant rather than just the reproductive parts.

Even though Mitchell sent the bulk of his plant collection to England in 1738 and in 1742, he continued to botanize



in Virginia. When he departed in 1746, he took more than a thousand specimens. Unfortunately, his ship was stopped by a Spanish vessel carrying pirates and the contents plundered. Although Mitchell was eventually able to recover the majority of his collection, most of it was no longer useful and was discarded.

Both Mitchell and Clayton correspondent with Cadwallader Colden of New York. Colden had initially come to America in 1715. Born in Ireland of Scottish parents and educated at the University of Edinburgh, he studied medicine in London before going to Philadelphia where he practiced medicine among other enterprises. Colden became a correspondent of James Petiver but apparently never sent him any plant collections. He returned to Scotland in 1715, married, and returned to Philadelphia where he continued to practice. However, in 1720, Colden was appointed Surveyor General for New York, and he moved to that Colony where he entered into a life of politics.

As a result of his position, Colden was able to become wealthy through land speculation, and was slowly able to amass an excellent scientific library. His correspondents were the "who's who" of American and European science, with Collinson, Gronovius and Linnaeus among his European associates, and the Bartrams, Clayton, Mitchell, and a host of others who would be important after 1753 among his American friends.

In 1739, Colden and his family left New York City and moved to an estate he named Coldenham. Here he was able to write on a wide variety of subjects, including botany. Colden began to study the

Linnaean method in the early 1740s, and with a visit from John Bartram in 1742, Colden began to seriously study the local flora. He collected plants around Coldenham and sent them to Collinson, and even Linnaeus. Soon he was attempting to prepare a flora of New York, but mostly it was a treatment of plants in his local area. Published from 1743 to 1750, in parts, Colden's "Plantae Coldenhamiae in provincia Novaboracensi Americanae sponte Crescentes" was used by Linnaeus to characterize a few species in 1753.

Colden, like Mitchell, found fault in Linnaeus' sexual system, and voiced his disagreements about it to Gronovius. Within a few years, Colden's interest in botany had lessened, but he was pleased to discover that his curiosity in botany had passed onto his daughter, Jane.

Jane Colden began her studies of botany about the time *Species plantarum* appeared in print, and by 1755 her father wrote to Gronovius of her pronounced skills. What correspondence he was receiving on botany, Cadwallader passed on to Jane. She exchanged seeds and specimens with several American and European naturalists, and entered into her own correspondence with a number of new naturalists, such as Alexander Garden, of Charles Town, South Carolina, who, like herself, would be a significant contributor to Linnaeus' subsequent editions of *Species plantarum*. She prepared a "Flora of New York" with some 340 illustrations, but the work was never published during her lifetime. It now appears that this failure was more one of her sex than her ability.

Both of the Coldens knew John Bartram. Of all the

Linnaean era collectors in temperate North America, John, and his son William, collected more widely than any other naturalist. Born in Pennsylvania of Quaker parents in 1699, he moved at an early age to North Carolina where he remained until a young man. Upon the death of an uncle, Bartram inherited a small farm near Darby, Pennsylvania, where he moved. After the death of his first wife in 1827, John and his only surviving son moved to a new farm on the Schuylkill River, a short distance from Philadelphia, and established a small but significant botanical garden on about five acres.

Bartram prospered in his farming, married again, and he was able to expand his land holdings so that he could eventually devote much of his personal time to botany and horticulture. Bartram soon began to explore the field of botany, mainly from the aspect of medicinal plants, learned to read Latin, and to read Linnaeus' writings as they became available in America. He also learned to read and write English, and while neither his English or Latin were perfect, he managed, and became an active participant in the scientific circles that dominated the lives of a handful of men in the Philadelphia area.

Like so many others, Bartram began to correspond with Collinson in the 1730s, and to exchange specimens. Some of his collections of dried plants went to Dillenius at the University of Oxford, and these Linnaeus likely saw in August of 1736. Collinson became an enthusiastic supporter of Bartram and encourage all who went to America to meet him. He also encourage John Bartram to travel and collect plants which would be of potential value to the horticultural

gardens of Europe. By 1738 Bartram was proposing to Collinson to make a major botanical expedition into Virginia, and to this Collinson added even more encouragement in the form of letters of introduction, instructions and advice of the art of collection live specimens, seeds and herbarium specimens. Soon Bartram seeds were sprouting in the Oxford Botanical Garden as well as at the Chelsea Physic Garden. Within a few years Collinson had established a network of supporters for Bartram, and as the years past, Bartram made more and more exciting discoveries of unique species heretofore unknown in the scientific world.

Many of Bartram seeds found their way to Linnaeus' garden at Uppsala, and through them, Linnaeus was able to describe new species of American plants. Bartram was now traveling widely in the eastern part of temperate North America, visiting not only the more remote regions along the coastal plain but the high mountains to the west. He made repeated visits into the colonies of New Jersey, Delaware and Maryland, as well as numerous trips to various parts of Pennsylvania. He traveled into New York, met Colden, and collected in the Catskills. He even went into southern Canada.

The Bartrams continued to collect well past 1753, and John and his son William soon became well known for their fine plants and exotic travels to the more remote regions of the eastern seaboard. The two men rose to fame, with John being appointed the Royal Botanist in 1765. Their 1765 expedition to Florida has become famous due to John's book published the following year.

A visitor to the Bartram



farm in the summer and fall of 1748 was Peter Kalm. A student of Linnaeus', Kalm came to America in September of 1748 with the intention of collecting dried herbarium specimens and seeds for his major professor. During his first fall he gathered seeds and plants in Pennsylvania and New Jersey, while during the summer he turned northward to New York and southern Canada returning to Philadelphia for the winter of 1749-1750. Kalm then traveled from New Jersey across western Pennsylvania to the eastern Great Lakes, collecting numerous specimens before his return to the city of Brotherly Love in October of 1750. From there, in February, 1751, Kalm sailed for England, and then on to Sweden where he arrived, laden with many new and wondrous plants, upon his professor's door at Uppsala in June.

### SPECIES PLANTARUM

For Carl Linnaeus, the idea of a treatment of all the species of the world began initially in 1733 when he first attempted the project. Almost at once he realized it was impossible to do at that time and turned to describing the genera instead. This effort resulted in the publication of *Genera plantarum* published in 1737. He then took a copy of his new book, added blank pages, and began to insert species. From 1746 to 1748 Linnaeus worked on a new draft of *Species plantarum* following the format he had used in his earlier (1738) *Hortus cliffortianus*. This proved equally impossible but for somewhat different reasons.

Much as Morison, Sherard and Dillenius realized the need for a new edition of Bauhin's *Pinax*, so too did Linnaeus when it came to eval-

uating the vast number of polynomials that had been published since 1623. The prospects of producing such a work was essentially nil. Dillenius had been unable to complete the work, and no doubt Linnaeus knew of the difficulties he had had and did not see any way of resolving them himself. Linnaeus did not see himself traveling now to London and reviewing the many collections or publications associated with the writings of Ray, Plukenet and Petiver, and it was these writers, in large part, whose nomenclature was uncertain and confusing. Certainly Linnaeus had been able to resolve some problems when working Gronovius' *Flora virginica*, but all of these men had published new species from all over the world. Particularly troublesome was Petiver who had described plants not only from the Carolinas and Florida of North America, but species from the interior of China, far off Japan, and remote regions of Africa. Linnaeus could not have a complete list of synonymy for each and every name; he had to rethink his manuscript and what he hoped to accomplish.

Linnaeus completed about a third of his proposed *Species plantarum* from 1746 to 1748 when he once again set the manuscript aside. He had not yet adopted the binomial system of nomenclature, and other duties prevented him from devoting the kind of time needed to do the work. Thus the book remained until June of 1751 when Kalm returned with his collections.

Perhaps spurred by Kalm, Linnaeus once again started on *Species plantarum*. By this time he had conceived of the handy index device of proposing a trivial name -- what we today call the species epithet -- to go along with the cor-

rect scientific phrase name by which each species should be known. He realized that he had to shorten his synonymy and could economically treat the world's flora only by having brief statements as to the distribution of each kind and a phrase name that did not exceed two lines of print. Taking his 1746-1748 draft, Linnaeus managed to rewrite the first 67 printed pages of his book in eight days. By November of 1751 Linnaeus had completed the first part (or volume), and by March, 1752, three-quarters of the text was written. In July, 1752, or some 13 months after beginning, Linnaeus completed the text for *Species plantarum*.

It is obvious that Linnaeus went quickly through the early sections of part one, and took most of his information from his previously written manuscript. Only a few Kalm collections were cited, and occasionally the same species is described later in the book -- in its correct position according to Linnaeus' scheme of classification -- with Linnaeus not realizing he had already treated that plant. As one proceeds through the text, Linnaeus became more exact in the citation of geographical location, his dependency upon Kalm collections for species from temperate North America increased, and he became more critical of his circumscription of genera. However, toward the latter third of the book, as Linnaeus' health began to fail and he began to hurry, he once again is not as careful and more errors appear. *Species plantarum* is filled with errors, omissions and an occasional strange statement. Linnaeus occasionally miscites places of publication, wrong page numbers or the incorrect figure or plate. In some instances Linnaeus gives seem-

ingly bizarre polynomials in synonymy, as in the case of the two Maryland-based polynomials he cites under *Osmunda cinnamomea*. A simple reading of the Latin would quickly show that these names ought to apply to *O. claytoniana*, yet Linnaeus puts them where he did. In large part this was likely due to his observation of specimens of *O. cinnamomea* at the Sherardian Herbarium at the University of Oxford where the names are given on the labels. However, there are also collections, from Maryland, of *O. claytoniana* with these same names also listed, so it is difficult to understand his treatment of these polynomials.

When the first edition of *Species plantarum* appeared in 1753, the botanical community did not immediately jump onto the Linnaean binomial bandwagon. His system of classification had long been criticized, and his critics were not immediately willing to embrace all of his radical departures from the established norm. It is important for modern workers to remember that even Linnaeus did not regard his trivial names as anything more than a convenient means of index his book. Philip Miller, the English gardener who had published his *Gardners dictionary* for years, did not use binomials until 1768 -- and then only in this one edition -- mainly because his book was already alphabetically arranged and did not need an index.

The impact of Linnaeus' *Species plantarum* was slowly felt. When copies finally arrived on the American continent, some workers immediately adopted the idea of binomials. Jane Colden in her unpublished book used them, as did the Bartrams. Alexander Garden used binomials when the species were known to him, but



otherwise used phrase names in his correspondence. With the appearance of the second edition of *Species plantarum* in 1762 and 1763, the trend to binomials was largely established. This new edition contained many new and exciting plants that Linnaeus had received from Jane Colden, Alexander Garden, John and William Bartram, and others who were now exploring and collecting in temperate North America. Not only would Linnaeus describe these species, but others, working elsewhere in Europe, would pen validly published scientific names to these collections and they too would rise in the world of systematic botany.

With the opening of the vast lands to the west of the Appalachian Mountains, the end of French and Indian War in America, and the growth of resident naturalists in America, the field of plant taxonomy and discovery would expand rapidly soon leaving behind even Linnaeus for a new generation of taxonomists.

#### SUMMARY OF SPECIES PLANTARUM

One cannot understate the impact Linnaeus had upon systematic botany. His work, and especially his first edition of *Species plantarum* have, by international agreement, become highly significant to all modern-day workers in the field of systematic botany. Nonetheless, a careful evaluation and summation of Linnaeus' state of knowledge regarding the vascular plants of temperate North America as defined by Linnaeus in 1753 has not been attempted. In the following section such a review will be made. It is necessary first to prepare listings of species, workers and publications by categories, and then to comment on these findings. The following

categories will be given:

1--All species mentioned in the first edition of *Species plantarum* with direct or indirect indication as being in temperate North America. This will include obvious errors made by Linnaeus.

2--A breakdown of these species into distributional groups as reported by Linnaeus, listing first those which Linnaeus considered to occur only in temperate North America; those which occur in this area but also occur elsewhere in the New World; those that occur in temperate North America and elsewhere in the world; and finally, those which Linnaeus does not specifically state to occur in temperate North America, but gives a synonym or reference based upon a temperate North American collection.

3--A listing of vascular plants species named for geographical regions in temperate North America.

4--A listing, with the collection numbers insofar as possible, of the Clayton collections Linnaeus indirectly cites when he gives Gronovius' *Flora virginica* among the list of publications he cites. In some instances Gronovius is basing his information upon a collection made by someone other than Clayton, and this can be discovered only by consulting the Gronovius herbarium now at the British Museum (Natural History) in London. In perhaps a few other instances, Gronovius may not have had a collection in hand, but garden material or information about a particular species in temperate North America and reported it. Most of these particular kinds of instances can be seen for those species which lack a Clayton collection number. However, it must be immediately noted that Clayton did send some specimens without collection numbers, and in some

cases Gronovius failed to give the number in his publication, so it cannot be assumed that in all instances where there is no number that this reference is based on something other than a Clayton sheet. The first list is by species name; the second list is by collection number.

5--A listing of seemingly Kalm collections taken not only from statements in *Species plantarum*, but from Linnaeus' herbarium at the Linnean Society in London. This is to be regarded as an incomplete listing, as it will require a more careful examination of Kalm collections housed elsewhere, and a comparison of those specimens with others in Linnaeus' herbarium before a more finalized list can be completed.

6--A listing of major publications cited by Linnaeus for those species which, in Linnaeus' opinion, were endemic to temperate North America in their distribution. Species with a more widespread distribution are not reviewed at this time.

7--A list of synonymies for some of the vascular plant species reported for temperate North America in Linnaeus' first edition of *Species plantarum*.

The review that follows is based upon observations obtained from these listings. In all instances they should be considered somewhat tentative as it has not been possible to correct errors made by Linnaeus, especially in the citation of literature, nor to review fully the holdings in the British Museum (Natural History) of the Gronovius herbarium. Until these and other similar tasks are completed it will be impossible to fully report on all aspects relative to the first edition of Linnaeus *Species plantarum*.

### Vascular Plants from Temperate North America Mentioned in Linnaeus' First Edition of *Species Plantarum*

*Acalypha virginica*  
*Acer negundo*  
*Acer pensylvanicum*  
*Acer rubrum*  
*Acer saccharinum*  
*Acnida cannabina*  
*Acrostichum areolatum*  
*Acrostichum platyneuros*  
*Acrostichum polypodioides*  
*Actaea racemosa*  
*Actaea spicata* var. *alba*  
*Adiantum pedatum*  
*Aesculus pavia*  
*Agave virginica*  
*Ageratum altissimum*  
*Agrimonia eupatoria*  
*Agrostis virginica*  
*Aletris farinosa*  
*Alisma cordifolia*  
*Alisma subulata*  
*Allium canadense*  
*Alsine media*  
*Alyssum hyperboreum*  
*Amaranthus graecizans*  
*Amaranthus hybridus*  
*Amaranthus hypocondriacus*  
*Amaranthus lividus*  
*Amaranthus retroflexus*  
*Amaranthus spinosus*  
*Amaryllis atamasca*  
*Ambrosia artemisiifolia*  
*Ambrosia elatior*  
*Ambrosia trifida*  
*Ammannia ramosior*  
*Amorpha fruticosa*  
*Anchusa virginiana*  
*Andromeda arborea*  
*Andromeda calyculata*  
*Andromeda mariana*  
*Andromeda paniculata*  
*Andromeda racemosa*  
*Andropogon alopecuroides*  
*Andropogon divaricatum*  
*Andropogon hirtum*  
*Andropogon nutans*  
*Andropogon virginicum*  
*Anemone dichotoma*  
*Anemone hepatica*  
*Anemone quinquefolia*  
*Anemone thalictroides*  
*Anemone virginiana*  
*Angelica atropurpurea*  
*Angelica lucida*  
*Angelica sylvestris*  
*Annona glabra*



<i>Annona muricata</i>	<i>Aster undulatus</i>
<i>Annona triloba</i>	<i>Aster vernus</i>
<i>Anthericum calyculatum</i>	<i>Astragalus canadensis</i>
<i>Antirrhinum canadense</i>	<i>Astragalus carolinianus</i>
<i>Antirrhinum elatine</i>	<i>Atriplex halimus</i>
<i>Aphanes arvensis</i>	<i>Atriplex laciniata</i>
<i>Apocynum androsaemifolium</i>	<i>Avena pennsylvanica</i>
<i>Apocynum cannabinum</i>	<i>Avena spicata</i>
<i>Aquilegia canadensis</i>	<i>Azalea lutea</i>
<i>Arabis canadensis</i>	<i>Azalea viscosa</i>
<i>Arabis lyrata</i>	
<i>Aralia nudicaulis</i>	<i>Baccharis foetida</i>
<i>Aralia racemosa</i>	<i>Baccharis halimifolia</i>
<i>Aralia spinosa</i>	<i>Baccharis ivaefolia</i>
<i>Arbutus uva-ursi</i>	<i>Bartsia coccinea</i>
<i>Arenaria rubra</i> var. <i>marina</i>	<i>Betonica annua</i>
<i>Arethusa bulbosa</i>	<i>Betula lenta</i>
<i>Arethusa divaricata</i>	<i>Betula nigra</i>
<i>Arethusa ophioglossoides</i>	<i>Bidens bipinnata</i>
<i>Aristolochia arborescens</i>	<i>Bidens bullata</i>
<i>Aristolochia serpentaria</i>	<i>Bidens frondosa</i>
<i>Arnica maritima</i>	<i>Bidens nivea</i>
<i>Arum dracontium</i>	<i>Bidens pilosa</i>
<i>Arum triphyllum</i>	<i>Bignonia caerulea</i>
<i>Arum virginicum</i>	<i>Bignonia capreolata</i>
<i>Arundo phragmites</i>	<i>Bignonia catalpa</i>
<i>Asarum canadense</i>	<i>Bignonia crucigera</i>
<i>Asarum virginicum</i>	<i>Bignonia radicans</i>
<i>Asclepias amoenae</i>	<i>Bignonia sempervirens</i>
<i>Asclepias decumbens</i>	<i>Briza eragrostis</i>
<i>Asclepias incarnata</i>	<i>Bromus ciliatus</i>
<i>Asclepias nivea</i>	<i>Bromus purgans</i>
<i>Asclepias purpurascens</i>	<i>Buchnera americana</i>
<i>Asclepias rubra</i>	<i>Bunias cakilae</i>
<i>Asclepias syriaca</i>	<i>Buphthalmum frutescens</i>
<i>Asclepias tuberosa</i>	<i>Buphthalmum helianthoides</i>
<i>Asclepias variagata</i>	<i>Burmansia biflora</i>
<i>Asclepias verticillata</i>	
<i>Ascyrum crux-andreae</i>	<i>Cacalia atriplicifolia</i>
<i>Ascyrum hypericoides</i>	<i>Cacalia porophyllum</i>
<i>Ascyrum villosum</i>	<i>Cacalia suaveolens</i>
<i>Asplenium rhizophyllum</i>	<i>Cactus opuntia</i>
<i>Aster annuus</i>	<i>Cactus pentagonus</i>
<i>Aster concolor</i>	<i>Caesalpinia brasiliensis</i>
<i>Aster cordifolius</i>	<i>Callicarpa americana</i>
<i>Aster divaricatus</i>	<i>Callitriche palustris</i>
<i>Aster dumosus</i>	<i>Caltha palustris</i>
<i>Aster ericoides</i>	<i>Campanula americana</i>
<i>Aster grandiflorus</i>	<i>Campanula perfoliata</i>
<i>Aster laevis</i>	<i>Canna glauca</i>
<i>Aster linariifolius</i>	<i>Cardamine virginica</i>
<i>Aster linifolius</i>	<i>Carduus altissimus</i>
<i>Aster miser</i>	<i>Carduus virginianus</i>
<i>Aster mutabilis</i>	<i>Carex folliculata</i>
<i>Aster novae-angliae</i>	<i>Carex pseudocyperus</i>
<i>Aster novi-belgii</i>	<i>Carex squarrosa</i>
<i>Aster puniceus</i>	<i>Carpinus betulus</i>
<i>Aster rigidus</i>	<i>Carpinus ostrya</i>
<i>Aster tenuifolius</i>	<i>Cassia chamaecrista</i>
<i>Aster tradescantii</i>	<i>Cassia ligustrina</i>

- Cassia marilandica*  
*Cassia nictitans*  
*Cassine peragua*  
*Ceanothus americanus*  
*Celastrus bullatus*  
*Celastrus myrtifolius*  
*Celastrus scandens*  
*Celosia paniculata*  
*Celtis occidentalis*  
*Cenchrus tribuloides*  
*Cephalanthus occidentalis*  
*Cerastium semidecandrum*  
*Cercis canadensis*  
*Chaerophyllum arborescens*  
*Chelidonium glaucium*  
*Chelone glabra*  
*Chelone hirsuta*  
*Chelone penstemon*  
*Chenopodium album*  
*Chenopodium anthelminticum*  
*Chenopodium virginicum*  
*Chionanthus virginica*  
*Chironia angularis*  
*Chironia campanulata*  
*Chironia dodecandra*  
*Chrysanthemum arcticum*  
*Chrysanthemum serotinum*  
*Chrysocoma graminifolia*  
*Chrysogonum virginianum*  
*Chrysosplenium oppositifolium*  
*Cicuta bulbifera*  
*Cicuta maculata*  
*Cinna arundinacea*  
*Circaea lutetiana*  
     var. *canadensis*  
*Cissampelos smilacina*  
*Cistus canadensis*  
*Claytonia virginica*  
*Clematis crispa*  
*Clematis viorna*  
*Clematis vitalba*  
*Clethra alnifolia*  
*Clinopodium incanum*  
*Clinopodium rugosum*  
*Clinopodium vulgare*  
*Clitoria mariana*  
*Clitoria virginiana*  
*Coix dactyloides*  
*Coix lacryma-jobi*  
*Collinsonia canadensis*  
*Commelina communis*  
*Commelina erecta*  
*Convallaria polygonatum*  
*Convallaria racemosa*  
*Convallaria stellata*  
*Convolvulus carolinus*  
*Convolvulus hederaceus*  
*Convolvulus panduratus*  
*Convolvulus repens*  
*Convolvulus spithameus*  
*Conyza asteroides*  
*Conyza bifrons* var. *flosculosa*  
*Conyza linifolia*  
*Coreopsis alternifolia*  
*Coreopsis angustifolia*  
*Coreopsis auriculata*  
*Coreopsis lanceolata*  
*Coreopsis tripteris*  
*Coreopsis verticillata*  
*Cornus canadensis*  
*Cornus florida*  
*Cornus sanguinea*  
*Cracca virginiana*  
*Crataegus coccinea*  
*Crataegus crus-galli*  
*Crataegus tomentosa*  
*Crataegus viridis*  
*Crescentia cujete*  
*Crotalaria alba*  
*Crotalaria perfoliata*  
*Crotalaria sagittalis*  
*Cucubalus stellatus*  
*Cupressus distichia*  
*Cupressus thyoides*  
*Cuscuta americana*  
*Cynanchum hirtum*  
*Cynanchum suberosum*  
*Cynoglossum virginianum*  
*Cynosurus aegyptius*  
*Cyperus arundinacea*  
*Cyperus odoratus*  
*Cyperus strigosus*  
*Cypripedium calceolus*  
*Dactylis cynosuroides*  
*Dalibarda repens*  
*Datisca hirta*  
*Datura stramonium*  
*Daucus carota*  
*Dianthera americana*  
*Dianthus plumarius*  
*Diodia virginiana*  
*Dioscorea villosa*  
*Diospyros virginiana*  
*Dipsacus fullonum*  
*Dirca palustris*  
*Dodecatheon meadia*  
*Dolichos polystachyus*  
*Dolichos regularis*  
*Draba verna*  
*Dracoccephalum virginianum*  
*Dracontium foetidum*  
*Drosera rotundifolia*  
*Elatine hydropiper*  
*Elephantopus scaber*  
*Elephantopus tomentosus*  
*Elymus canadensis*  
*Elymus hystrix*  
*Elymus virginicus*



<i>Epigaea repens</i>	<i>Gnaphalium plantaginifolium</i>
<i>Epilobium hirsutum</i>	<i>Gnaphalium purpureum</i>
<i>Equisetum arvense</i>	<i>Gomphrena interrupta</i>
<i>Equisetum hyemale</i>	<i>Gomphrena serrata</i>
<i>Erigeron camphoratum</i>	<i>Gratiola dubia</i>
<i>Erigeron canadense</i>	<i>Gratiola virginiana</i>
<i>Erigeron philadelphicus</i>	<i>Guilandina dioica</i>
<i>Eriocaulon decangulare</i>	
<i>Eriophorum virginicum</i>	<i>Hamamelis virginiana</i>
<i>Eryngium aquaticum</i>	<i>Hedera quinquefolia</i>
<i>Eryngium foetidum</i>	<i>Hedysarum canadense</i>
<i>Erythrina herbacea</i>	<i>Hedysarum canescens</i>
<i>Erythronium dens-canis</i>	<i>Hedysarum frutescens</i>
<i>Eupatorium altissimum</i>	<i>Hedysarum hirtum</i>
<i>Eupatorium aromaticum</i>	<i>Hedysarum marilandicum</i>
<i>Eupatorium coelestinum</i>	<i>Hedysarum nudiflorum</i>
<i>Eupatorium hyssopifolium</i>	<i>Hedysarum paniculatum</i>
<i>Eupatorium perfoliatum</i>	<i>Hedysarum repens</i>
<i>Eupatorium purpureum</i>	<i>Hedysarum violaceum</i>
<i>Eupatorium rotundifolium</i>	<i>Hedysarum virginicum</i>
<i>Eupatorium scandens</i>	<i>Hedysarum viridiflorum</i>
<i>Eupatorium sessilifolium</i>	<i>Hedysarum volubile</i>
<i>Eupatorium trifoliatum</i>	<i>Helenium autumnale</i>
<i>Euphorbia corollata</i>	<i>Helianthus angustifolius</i>
<i>Euphorbia ipecacuanhae</i>	<i>Helianthus atrorubens</i>
<i>Euphorbia maculata</i>	<i>Helianthus decapetalus</i>
<i>Euphorbia polygonifolia</i>	<i>Helianthus divaricatus</i>
<i>Euphorbia portulacoides</i>	<i>Helianthus giganteus</i>
<i>Euonymus americanus</i>	<i>Helianthus laevis</i>
	<i>Helianthus multiflorus</i>
<i>Fagus pumila</i>	<i>Helianthus strumosus</i>
<i>Ferula canadensis</i>	<i>Heliotropium indicum</i>
<i>Fraxinus americana</i>	<i>Helleborus trifolius</i>
<i>Fumaria cucullaria</i>	<i>Helonias bullata</i>
<i>Fumaria sempervirens</i>	<i>Heuchera americana</i>
	<i>Hibiscus moscheutos</i>
<i>Galax aphylla</i>	<i>Hibiscus palustris</i>
<i>Galium bermudense</i>	<i>Hibiscus virginicus</i>
<i>Galium tinctorium</i>	<i>Hieracium gronovii</i>
<i>Galium trifidum</i>	<i>Hieracium kalmii</i>
<i>Gaultheria procumbens</i>	<i>Hieracium paniculatum</i>
<i>Gaura biennis</i>	<i>Hieracium venosum</i>
<i>Gentiana ciliata</i>	<i>Hippophae canadensis</i>
<i>Gentiana quinquefolia</i>	<i>Holcus laxus</i>
<i>Gentiana saponaria</i>	<i>Holcus striatus</i>
<i>Gentiana villosa</i>	<i>Holosteum succulentum</i>
<i>Geranium carolinianum</i>	<i>Hordeum jubatum</i>
<i>Geranium maculatum</i>	<i>Horminum virginicum</i>
<i>Gerardia flava</i>	<i>Houstonia caerulea</i>
<i>Gerardia pedicularia</i>	<i>Houstonia purpurea</i>
<i>Gerardia purpurea</i>	<i>Hydrangea arborescens</i>
<i>Geum virginianum</i>	<i>Hydrocotyle americana</i>
<i>Gleditsia triacanthos</i>	<i>Hydrocotyle umbellata</i>
<i>Glycine apios</i>	<i>Hydrophyllum virginianum</i>
<i>Glycine bracteata</i>	<i>Hyoseris virginica</i>
<i>Glycine comosa</i>	<i>Hypericum ascyron</i>
<i>Glycine frutescens</i>	<i>Hypericum canadense</i>
<i>Glycine tomentosa</i>	<i>Hypericum kalmianum</i>
<i>Gnaphalium margaritaceum</i>	<i>Hypericum lasianthus</i>
<i>Gnaphalium obtusifolium</i>	<i>Hypericum mutilum</i>

*Hypericum setosum*  
*Hyssopus nepetoides*

*Ilex aquifolium*  
*Ilex cassine*  
*Impatiens noli-tangere*  
*Ipomoea carolina*  
*Ipomoea lacunosa*  
*Ipomoea nyctelea*  
*Ipomoea tamnifolia*  
*Iris verna*  
*Iris versicolor*  
*Iris virginica*  
*Isnardia palustris*  
*Itea virginica*  
*Iva frutescens*

*Juglans alba*  
*Juglans nigra*  
*Juncus bulbosus*  
*Juncus campestris*  
*Juncus effusus*  
*Juncus filiformis*  
*Juniperus virginiana*  
*Jussiaea erecta*

*Kalmia angustifolia*  
*Kalmia latifolia*

*Lactuca canadensis*  
*Lamium amplexicaule*  
*Laurus aestivalis*  
*Laurus benzoin*  
*Laurus borbonia*  
*Laurus indica*  
*Laurus sassafras*  
*Laurus winterana*  
*Lechea major*  
*Lechea minor*  
*Leontice thalictroides*  
*Leontodon dandelion*  
*Lepidium virginicum*  
*Ligusticum scothieum*  
*Lilium camschatcense*  
*Lilium canadense*  
*Limodorum tuberosum*  
*Linnaea borealis*  
*Linum virginianum*  
*Liquidambar peregrina*  
*Liquidambar styraciflua*  
*Liriodendron tulipifera*  
*Lithospermum virginianum*  
*Lobelia cardinalis*  
*Lobelia cliffortiana*  
*Lobelia inflata*  
*Lobelia kalmii*  
*Lobelia siphilitica*  
*Lonicera marilandica*  
*Lonicera sempervirens*  
*Lonicera symphoricarpos*

*Ludwigia alternifolia*  
*Lupinus perennis*  
*Lycopodium alopecuroides*  
*Lycopodium apodum*  
*Lycopodium carolinianum*  
*Lycopodium complanatum*  
*Lycopodium obscurum*  
*Lycopodium rupestre*  
*Lycopsis virginica*  
*Lycopus virginicus*  
*Lysimachia ciliata*  
*Lysimachia punctata*  
*Lysimachia quadrifolia*  
*Lythrum lineare*  
*Lythrum petiolatum*  
*Lythrum verticillatum*

*Magnolia virginiana*  
*Magnolia virginiana*  
     var. *acuminata*  
*Magnolia virginiana*  
     var. *foetida*  
*Magnolia virginiana*  
     var. *glauc*  
*Magnolia virginiana*  
     var. *grisea*  
*Magnolia virginiana*  
     var. *tripetala*  
*Malva caroliniana*  
*Medeola virginiana*  
*Medicago virginica*  
*Melanthium virginicum*  
*Melica altissima*  
*Melissa nepeta*  
*Melissa pulegioides*  
*Melothria pendula*  
*Menispermum canadense*  
*Menispermum carolinum*  
*Menispermum virginicum*  
*Mentha canadensis*  
*Mentha spicata* var. *viridis*  
*Mentzelia aspera*  
*Mespilus arbutifolia*  
*Mespilus canadensis*  
*Mimulus ringens*  
*Mitchella repens*  
*Mitella diphylla*  
*Mollugo verticillata*  
*Monarda ciliata*  
*Monarda clinopodia*  
*Monarda didyma*  
*Monarda fistulosa*  
*Monarda punctata*  
*Monotropa hypopithys*  
*Monotropa uniflora*  
*Morus rubra*  
*Myosotis virginiana*  
*Myrica asplenifolia*  
*Myrica cerifera*



Napaea dioica	Philadelphus inodorus
Napaea hermaphrodita	Phlox divaricata
Nepeta virginica	Phlox glaberrima
Nicotiana rustica	Phlox maculata
Nymphaea alba	Phlox ovata
Nymphaea lotus	Phlox paniculata
Nymphaea lutea	Phlox pilosa
Nymphaea nelumbo	Phlox setacea
Nyssa aquatica	Phlox subulata
	Phryma leptostachya
Obolaria virginica	Physalis pruinosa
Oenothera biennis	Physalis pubescens
Oenothera fruticosa	Physalis viscosa
Oenothera mollissima	Phytolacca americana
Oldenlandia uniflora	Pinus balsamea
Onoclea sensibilis	Pinus strobus
Ophiorrhiza mitreola	Pinus taeda
Ophrys cernua	Pistacia simaruba
Ophrys lilifolia	Plantago virginica
Orchis ciliaris	Platanus occidentalis
Orchis flava	Poa capillaris
Orchis psychodes	Poa compressa
Orchis spectabilis	Poa flava
Origanum vulgare	Podophyllum diphyllum
Ornithogalum biale	Podophyllum peltatum
Ornithogalum canadense	Polemonium caeruleum
Ornithogalum hirsutum	Polemonium dubium
Orobanche uniflora	Polemonium rubrum
Orobanche virginiana	Polygala cruciata
Orontium aquaticum	Polygala incarnata
Osmunda cinnamomea	Polygala lutea
Osmunda claytoniana	Polygala sanguinea
Osmunda regalis	Polygala senega
Osmunda virginiana	Polygala verticillata
Osteospermum uvedalia	Polygala viridescens
Othonna cineraria	Polygonum arifolium
Oxalis longiflora	Polygonum articulatum
Oxalis stricta	Polygonum aviculare
Oxalis violacea	Polygonum convolvulus
	Polygonum erectum
Panax quinquefolius	Polygonum maritimum
Panax trifolius	Polygonum pensylvanicum
Pancratium carolinianum	Polygonum persicaria
Panicum capillare	Polygonum sagittatum
Panicum clandestinum	Polygonum scandens
Panicum crusgalli	Polygonum virginianum
Panicum dichotomum	Polypodium bulbiferum
Panicum dissectum	Polypodium lonchitis
Panicum filiforme	Polypodium marginale
Panicum glaucum	Polypodium noveboracense
Panicum italicum	Polypodium phegopteris
Panicum latifolium	Polygonum virginianum
Panicum sanguinale	Polypremum procumbens
Panicum virgatum	Populus balsamifera
Parthenium integrifolium	Populus heterophylla
Passiflora incarnata	Populus nigra
Passiflora lutea	Polymnia canadensis
Penthorum sedoides	Pontederia cordata
Phalaris oryzoides	Portulaca oleracea
Phaseolus helvulus	Potamogeton nutans

Potentilla canadensis	Sagina virginica
Potentilla norvegica	Sagittaria sagittifolia
Potentilla reptans	Salicornia virginia
Prenanthes alba	Salsola kali
Prenanthes altissima	Salsola prostrata
Prinos glaber	Salvia lyrata
Prinos verticillatus	Salvia urticifolia
Proserpinaca palustris	Sambucus canadensis
Prunus lusitanica	Samolus valerandii
Prunus virginiana	Sanguinaria canadensis
Ptelea trifoliata	Sanguisorba canadensis
Pteris atropurpurea	Sanicula canadensis
Pulmonaria virginica	Sanicula europaea
Pyrola maculata	Sanicula marilandica
Pyrola rotundifolia	Saponaria officinalis
Pyrola umbellata	Sarothra gentianoides
Pyrus coronaria	Sarracenia flava
	Sarracenia purpurea
Quercus alba	Satureja origanoides
Quercus nigra	Satureja virginiana
Quercus phellos	Saururus cernuus
Quercus prinus	Saxifraga nivalis
Quercus rubra	Saxifraga pensylvanica
Queria canadensis	Scandix cerefolium
	Scandix procumbens
Ranunculus abortivus	Schwalbea americana
Ranunculus repens	Schoenus glomeratus
Renealmia usneoides	Scirpus capitatus
Rhexia mariana	Scirpus glomeratus
Rhexia virginica	Scirpus retrofractus
Rhinanthus virginica	Scirpus spadicus
Rhododendron maximum	Scrophularia marilandica
Rhus copallinum	Scrophularia nodosa
Rhus glabra	Scutellaria hyssopifolia
Rhus radicans	Scutellaria integrifolia
Rhus toxicodendron	Scutellaria lateriflora
Rhus vernix	Senecio aureus
Ribes cynosbati	Senecio canadensis
Ribes nigrum	Senecio hieracifolius
Ribes oxyacanthoides	Serratula glauca
Robinia pseudoacacia	Serratula noveboracensis
Rosa carolina	Serratula praealta
Rubus caesius	Serratula scariosa
Rubus canadensis	Serratula spicata
Rubus fruticosus	Serratula squarrosa
Rubus hispidus	Sicyos angulata
Rubus odoratus	Sida abutilon
Rubus occidentalis	Sida crispa
Rudbeckia hirta	Sida rhombifolia
Rudbeckia laciniata	Sida spinosa
Rudbeckia oppositifolia	Sigesbeckia occidentalis
Rudbeckia purpurea	Silene antirrhina
Rudbeckia triloba	Silene nocturna
Ruellia biflora	Silene virginica
Ruellia strepens	Silphium asteriscus
Rumex acetosella	Silphium helianthoides
Rumex britannica	Silphium laciniatum
Rumex persicarioides	Silphium solidaginoides
Rumex sanguineus	Silphium trifoliatum
Rumex verticillatus	Sison canadense



<i>Sisymbrium nasturtium-aquaticum</i>	<i>Thalictrum purpurascens</i>
<i>Sisyrinchium bermudiana</i>	<i>Thaspia trifoliata</i>
<i>Sium rigidius</i>	<i>Thesium umbellatum</i>
<i>Sloanea emarginata</i>	<i>Thuja occidentalis</i>
<i>Smilax bona-nox</i>	<i>Tiarella cordifolia</i>
<i>Smilax caduca</i>	<i>Tilia americana</i>
<i>Smilax herbacea</i>	<i>Tradescantia virginiana</i>
<i>Smilax lanceolata</i>	<i>Tragopogon virginicum</i>
<i>Smilax laurifolia</i>	<i>Trichostema brachiatum</i>
<i>Smilax pseudo-china</i>	<i>Trichostema dichotomum</i>
<i>Smilax rotundifolia</i>	<i>Trifolium arvense</i>
<i>Smilax sarsaparilla</i>	<i>Trifolium biflorum</i>
<i>Smilax tannoides</i>	<i>Trifolium comosum</i>
<i>Smyrnum aureum</i>	<i>Trifolium reflexum</i>
<i>Smyrnum integerrimum</i>	<i>Trifolium repens</i>
<i>Solanum carolinense</i>	<i>Trillium cernuum</i>
<i>Solanum diphyllum</i>	<i>Trillium erectum</i>
<i>Solanum mammosum</i>	<i>Trillium sessile</i>
<i>Solanum nigrum</i>	<i>Triosteum angustifolium</i>
var. <i>virginicum</i>	<i>Triosteum perfoliatum</i>
<i>Solanum nigrum</i>	
var. <i>vulgare</i>	<i>Ulmus americana</i>
<i>Solanum tomentosum</i>	<i>Uniola paniculata</i>
<i>Solanum verbascifolium</i>	<i>Uniola spicata</i>
<i>Solanum virginianum</i>	<i>Urtica canadensis</i>
<i>Solidago altissima</i>	<i>Urtica capitata</i>
<i>Solidago caesia</i>	<i>Urtica cylindrica</i>
<i>Solidago canadensis</i>	<i>Urtica divaricata</i>
<i>Solidago flexicaulis</i>	<i>Urtica pumila</i>
<i>Solidago lateriflora</i>	<i>Utricularia gibba</i>
<i>Solidago latifolia</i>	<i>Utricularia subulata</i>
<i>Solidago noveboracensis</i>	<i>Uvularia perfoliata</i>
<i>Solidago rigida</i>	<i>Uvularia sessilifolia</i>
<i>Solidago sempervirens</i>	
<i>Sonchus canadensis</i>	<i>Vaccinium album</i>
<i>Sonchus floridanus</i>	<i>Vaccinium corymbosum</i>
<i>Sophora tinctoria</i>	<i>Vaccinium frondosum</i>
<i>Sparganium erectum</i>	<i>Vaccinium hispidulum</i>
<i>Spermacoce tenuior</i>	<i>Vaccinium ligustrinum</i>
<i>Spiraea aruncus</i>	<i>Vaccinium mucronatum</i>
<i>Spiraea hypericifolia</i>	<i>Vaccinium stamineum</i>
<i>Spiraea opulifolia</i>	<i>Valeriana cornucopiae</i>
<i>Spiraea tomentosa</i>	<i>Valeriana locusta</i> var. <i>radiata</i>
<i>Spiraea trifoliata</i>	<i>Veratrum luteum</i>
<i>Staphylea trifolia</i>	<i>Verbena hastata</i>
<i>Statice armeria</i>	<i>Verbena nodiflora</i>
<i>Statice limonium</i>	<i>Verbena spuria</i>
<i>Stewartia malacodendron</i>	<i>Verbena urticifolia</i>
<i>Stipa avenacea</i>	<i>Verbesina alba</i>
<i>Swertia corniculata</i>	<i>Verbesina virginica</i>
<i>Swertia difformis</i>	<i>Veronica anagallis-aquatica</i>
	<i>Vernonica arvensis</i>
<i>Taxus baccata</i>	<i>Veronica beccabunga</i>
<i>Tetracera volubilis</i>	<i>Veronica marilandica</i>
<i>Tetragonotheca helianthoides</i>	<i>Veronica serpyllifolia</i>
<i>Teucrium canadense</i>	<i>Veronica virginica</i>
<i>Teucrium chamaepitys</i>	<i>Viburnum acerifolium</i>
<i>Teucrium virginicum</i>	<i>Viburnum dentatum</i>
<i>Thalictrum cornutii</i>	<i>Viburnum lentago</i>
<i>Thalictrum dioicum</i>	<i>Viburnum nudum</i>

<i>Viburnum prunifolium</i>	<i>Bignonia capreolata</i>
<i>Viola canadensis</i>	<i>Bignonia radicans</i>
<i>Viola lanceolata</i>	<i>Bupthalmum helianthoides</i>
<i>Viola palmata</i>	<i>Cacalia porophyllum</i>
<i>Viola pedata</i>	<i>Cactus pentagonus</i>
<i>Viola primulifolia</i>	<i>Campanula americana</i>
<i>Viscum purpureum</i>	<i>Celosia paniculata</i>
<i>Viscum rubrum</i>	<i>Cephalanthus occidentalis</i>
<i>Viscum terrestre</i>	<i>Chionanthus virginica</i>
<i>Vitex agnus-castus</i>	<i>Chrysanthemum serotinum</i>
<i>Vitis arborea</i>	<i>Circaea lutetiana</i>
<i>Vitis labrusca</i>	var. <i>canadensis</i>
<i>Vitis laciniosa</i>	<i>Clitoria mariana</i>
<i>Vitis vinifera</i>	<i>Coix dactyloides</i>
<i>Vitis vulpina</i>	<i>Commelina communis</i>
<i>Xanthium strumarium</i>	<i>Convolvulus repens</i>
<i>Xyris indica</i>	<i>Conyza asteroides</i>
	<i>Cynanchum hirtum</i>
<i>Yucca filamentosa</i>	<i>Cyperus odoratus</i>
<i>Yucca gloriosa</i>	<i>Diospyros virginiana</i>
	<i>Dracocephalum virginianum</i>
<i>Zannichellia palustris</i>	<i>Eriocaulon decangulare</i>
<i>Zanthoxylum clava-herculis</i>	<i>Eupatorium purpureum</i>
<i>Zizania aquatica</i>	<i>Euphorbia maculata</i>
	<i>Fagus pumila</i>
<b>Vascular Plants from Temperate North America Mentioned in Linnaeus' First Edition of Species Plantarum as Occurring only in Temperate North America</b>	<i>Galium tinctorium</i>
	<i>Gomphrena interrupta</i>
<b>America</b>	<i>Gomphrena serrata</i>
<i>Actaea spicata</i> var. <i>alba</i>	<i>Hedysarum volubile</i>
<i>Aletris farinosa</i>	<i>Helenium autumnale</i>
<i>Alyssum hyperboreum</i>	<i>Helianthus divaricatus</i>
<i>Andropogon alopecuroides</i>	<i>Hydrocotyle americana</i>
<i>Andropogon virginicum</i>	<i>Hydrocotyle umbellata</i>
<i>Annona muricata</i>	<i>Jussiaea erecta</i>
<i>Arabis canadensis</i>	<i>Limodorum tuberosum</i>
<i>Arethusa divaricata</i>	<i>Liriodendron tulipifera</i>
<i>Aristolochia arborescens</i>	<i>Mentzelia aspera</i>
<i>Arum dracontium</i>	<i>Mitella diphylla</i>
<i>Asclepias amoena</i>	<i>Myrica asplenifolia</i>
<i>Asclepias tuberosa</i>	<i>Nyssa aquatica</i>
<i>Asclepias variagata</i>	<i>Osmunda virginiana</i>
<i>Aster dumosus</i>	<i>Panicum filiforme</i>
<i>Aster ericoides</i>	<i>Panicum latifolium</i>
<i>Aster grandiflorus</i>	<i>Phlox paniculata</i>
<i>Aster laevis</i>	<i>Phryma leptostachya</i>
<i>Aster linariifolius</i>	<i>Physalis pruinosa</i>
<i>Aster linifolius</i>	<i>Platanus occidentalis</i>
<i>Aster miser</i>	<i>Podophyllum peltatum</i>
<i>Aster mutabilis</i>	<i>Polygonum dens</i>
<i>Aster puniceus</i>	<i>Populus balsamifera</i>
<i>Aster tenuifolius</i>	<i>Pyrola maculata</i>
<i>Aster undulatus</i>	<i>Quercus nigra</i>
<i>Bidens bullata</i>	<i>Quercus phellos</i>
<i>Bidens frondosa</i>	<i>Quercus prinus</i>
<i>Bidens pilosa</i>	<i>Rhus copallinum</i>
	<i>Rhus glabra</i>
	<i>Sanguinaria canadensis</i>
	<i>Sarracenia flava</i>
	<i>Sarracenia purpurea</i>
	<i>Schwalbea americana</i>



*Senecio hieracifolius*  
*Serratula spicata*  
*Silphium laciniatum*  
*Sison canadense*  
*Smyrnum aureum*  
*Solanum diphyllum*  
*Solanum tomentosum*  
*Solanum verbascifolium*  
*Solanum virginianum*  
*Solidago altissima*  
*Solidago caesia*  
*Solidago lateriflora*  
*Solidago noveboracensis*  
*Trichostema brachiatum*  
*Trifolium comosum*  
*Triosteum perfoliatum*  
*Uniola spicata*  
*Vaccinium corymbosum*  
*Vaccinium frondosum*  
*Vaccinium mucronatum*  
*Vaccinium stamineum*  
*Vitis labrusca*

# Canada

*Actaea racemosa*  
*Adiantum pedatum*  
*Ageratum altissimum*  
*Allium canadense*  
*Ambrosia elatior*  
*Ambrosia trifida*  
*Anemone quinquefolia*  
*Anemone thalictroides*  
*Angelica atropurpurea*  
*Angelica lucida*  
*Antirrhinum canadense*  
*Apocynum androsaemifolium*  
*Apocynum cannabinum*  
*Aquilegia canadensis*  
*Arabis lyrata*  
*Aralia racemosa*  
*Arethusa bulbosa*  
*Arethusa ophioglossoides*  
*Asarum canadense*  
*Asclepias incarnata*  
*Aster annuus*  
*Astragalus canadensis*  
*Betula lenta*  
*Betula nigra*  
*Bromus ciliatus*  
*Bromus purgans*  
*Buchnera americana*  
*Cacalia atriplicifolia*  
*Carex folliculata*  
*Carex squarrosa*  
*Celastrus scandens*  
*Chelone glabra*  
*Chironia campanulata*  
*Chrysocoma graminifolia*  
*Cicuta bulbifera*  
*Cinna arundinacea*

*Cistus canadensis*  
*Collinsonia canadensis*  
*Convallaria racemosa*  
*Convallaria stellata*  
*Conyza bifrons*  
     var. *flosculosa*  
*Conyza linifolia*  
*Coreopsis alternifolia*  
*Cornus canadensis*  
*Cracca virginiana*  
*Crataegus coccinea*  
*Cucubalus stellata*  
*Cupressus thyoides*  
*Dalibarda repens*  
*Elymus canadensis*  
*Epigaea repens*  
*Erigeron philadelphicus*  
*Eupatorium rotundifolium*  
*Euphorbia corollata*  
*Euphorbia ipecacuanhae*  
*Euphorbia polygonifolia*  
*Fumaria cucullaria*  
*Fumaria sempervirens*  
*Galium trifidum*  
*Gaultheria procumbens*  
*Gerardia flava*  
*Gerardia pedicularia*  
*Gerardia purpurea*  
*Guilandina dioica*  
*Hedera quinquefolia*  
*Hedysarum canadense*  
*Helianthus decapetalus*  
*Helianthus giganteus*  
*Helianthus strumosus*  
*Hibiscus moscheutos*  
*Hibiscus palustris*  
*Hieracium paniculatum*  
*Hippophae canadensis*  
*Holcus laxus*  
*Hordeum jubatum*  
*Hypericum canadense*  
*Hypericum mutilum*  
*Hyssopus nepetoides*  
*Lactuca canadensis*  
*Lechea major*  
*Lechea minor*  
*Lilium canadense*  
*Liquidambar peregrina*  
*Lobelia cliffortiana*  
*Lobelia inflata*  
*Lobelia kalmii*  
*Lycopodium alopecuroides*  
*Lysimachia ciliata*  
*Melissa pulegioides*  
*Menispermum canadense*  
*Mentha canadensis*  
*Mespilus canadensis*  
*Mimulus ringens*  
*Monarda fistulosa*  
*Monotropa uniflora*

*Ophrys cernua*  
*Orchis ciliaris*  
*Orchis psycodes*  
*Ornithogalum hirsutum*  
*Orontium aquaticum*  
*Othonna cineraria*  
*Oxalis violacea*  
*Panax quinquefolius*  
*Pinus balsamea*  
*Pinus strobus*  
*Pinus taeda*  
*Poa capillaris*  
*Polygala incarnata*  
*Polygonum articulatum*  
*Polypodium bulbiferum*  
*Polypodium marginale*  
*Polypodium noveboracense*  
*Polymnia canadensis*  
*Potentilla canadensis*  
*Prenanthes altissima*  
*Prinos glaber*  
*Queria canadensis*  
*Ranunculus abortivus*  
*Rhus radicans*  
*Rhus toxicodendron*  
*Ribes cynosbati*  
*Ribes oxyacanthoides*  
*Rubus canadensis*  
*Rubus hispidus*  
*Rubus odoratus*  
*Rubus occidentalis*  
*Rudbeckia hirta*  
*Rudbeckia laciniata*  
*Sanguisorba canadensis*  
*Saxifraga pensylvanica*  
*Scutellaria integrifolia*  
*Scutellaria lateriflora*  
*Senecio aureus*  
*Senecio canadensis*  
*Smilax caduca*  
*Smilax rotundifolia*  
*Solidago canadensis*  
*Solidago flexicaulis*  
*Solidago latifolia*  
*Solidago sempervirens*  
*Sonchus canadensis*  
*Sonchus floridanus*  
*Spiraea trifoliata*  
*Teucrium canadense*  
*Thalictrum cornutii*  
*Thalictrum dioicum*  
*Thalictrum purpurascens*  
*Tilia americana*  
*Tragopogon virginicum*  
*Trifolium biflorum*  
*Urtica capitata*  
*Urtica divaricata*  
*Urtica pumila*  
*Uvularia perfoliata*  
*Uvularia sessilifolia*

*Veratrum luteum*  
*Verbena hastata*  
*Verbena spuria*  
*Verbena urticifolia*  
*Viburnum lentago*  
*Viburnum prunifolium*  
*Viola canadensis*

# **Carolina**

*Amorpha fruticosa*  
*Andromeda arborea*  
*Annona glabra*  
*Annona triloba*  
*Asarum virginicum*  
*Asclepias purpurascens*  
*Astragalus carolinianus*  
*Bidens nivea*  
*Bignonia caerulea*  
*Callicarpa americana*  
*Canna glauca*  
*Carduus altissimus*  
*Ceanothus americanus*  
*Cissampelos smilacina*  
*Clematis crispa*  
*Clematis viorna*  
*Clethra alnifolia*  
*Convolvulus carolinus*  
*Coreopsis lanceolata*  
*Crotalaria alba*  
*Crotalaria perfoliata*  
*Cupressus distichia*  
*Erythrina herbacea*  
*Eupatorium coelestinum*  
*Fraxinus americana*  
*Geranium carolinianum*  
*Glycine frutescens*  
*Gnaphalium purpureum*  
*Hedysarum marilandicum*  
*Horminum virginicum*  
*Ilex cassine*  
*Ipomoea carolina*  
*Ipomoea lacunosa*  
*Ipomoea tammifolia*  
*Juniperus virginiana*  
*Laurus borbonia*  
*Laurus sassafras*  
*Lonicera marilandica*  
*Lonicera symphoricarpos*  
*Lycopodium apodum*  
*Lycopodium carolinianum*  
*Magnolia virginiana*  
     var. *acuminata*  
     var. *foetida*  
     var. *glauca*  
     var. *grisea*  
     var. *tripetala*  
*Malva caroliniana*  
*Menispermum carolinum*  
*Menispermum virginicum*  
*Mitchella repens*



Myrica cerifera  
 Phaseolus helvulus  
 Philadelphus inodorus  
 Polemonium rubrum  
 Polyprenum procumbens  
 Prenanthes alba  
 Quercus rubra  
 Rosa carolina  
 Rudbeckia purpurea  
 Ruellia biflora  
 Ruellia strepens  
 Serratula glauca  
 Serratula praealta  
 Silene antirrhina  
 Silphium asteriscus  
 Sloanea emarginata  
 Smilax bona-nox  
 Smilax laurifolia  
 Smilax tamnoides  
 Solanum carolinense  
 Spermacoce tenuior  
 Spiraea hypericifolia  
 Spiraea opulifolia  
 Trillium cernuum  
 Trillium sessile  
 Uniola paniculata  
 Viscum purpureum  
 Viscum rubrum  
 Vitis arborea

#### Florida

Actaea racemosa  
 Dioscorea villosa  
 Laurus sassafras  
 Polygonum arifolium

#### Maryland

Acrostichum areolatum  
 Asarum virginicum  
 Cassia marilandica  
 Iris versicolor  
 Juglans nigra  
 Kalmia latifolia  
 Lonicera marilandica  
 Mitchellia repens  
 Monotropa uniflora  
 Osmunda cinnamomea  
 Polygala senega  
 Polygonum sagittatum  
 Rhexia mariana  
 Sanicula marilandica  
 Saururus cernuus  
 Serratula glauca  
 Smilax herbacea  
 Valeriana locusta  
     var. radiata

#### Mississippi

Erythrina herbacea  
 Silphium laciniatum

#### New England

Aster novae-angliae

#### New Jersey

Kalmia angustifolia

#### New York

Bartsia coccinea  
 Holosteum succulentum  
 Kalmia angustifolia  
 Monarda didyma  
 Solidago sempervirens

#### Pennsylvania

Acer pensylvanicum  
 Acer rubrum  
 Acer saccharinum  
 Amaranthus retroflexus  
 Ambrosia artemisiifolia  
 Andromeda racemosa  
 Aster novi-belgii  
 Avena pensylvanica  
 Clethra alnifolia  
 Datisca hirta  
 Eupatorium altissimum  
 Euphorbia portulacoides  
 Gaura biennis  
 Gentiana quinquefolia  
 Gnaphalium obtusifolium  
 Gnaphalium purpureum  
 Helonias bullata  
 Hieracium gronovii  
 Hieracium kalmii  
 Iris versicolor  
 Kalmia angustifolia  
 Kalmia latifolia  
 Linum virginianum  
 Lycopodium apodum  
 Lycopodium obscurum  
 Monarda didyma  
 Myrica cerifera  
 Panax quinquefolius  
 Polygala senega  
 Polygonum erectum  
 Polygonum pensylvanicum  
 Prenanthes alba  
 Sarothra gentianoides  
 Saxifraga pensylvanica  
 Serratula praealta  
 Smilax tamnoides  
 Solidago rigida  
 Spiraea tomentosa  
 Thesium umbellatum  
 Trichostema dichotomum  
 Vaccinium album  
 Vaccinium ligustrinum  
 Viscum terrestre

#### Virginia

Acer negundo

- Acer rubrum*  
*Acnida cannabina*  
*Acrostichum areolatum*  
*Acrostichum platyneuros*  
*Actaea racemosa*  
*Adiantum pedatum*  
*Agave virginica*  
*Ageratum altissimum*  
*Agrostis virginica*  
*Alisma cordifolia*  
*Alisma subulata*  
*Amaranthus graecizans*  
*Amaranthus hybridus*  
*Amaranthus hypochondriacus*  
*Amaranthus lividus*  
*Amaryllis atamasca*  
*Ambrosia artemisiifolia*  
*Ambrosia elatior*  
*Ambrosia trifida*  
*Anemone ramosior*  
*Anchusa virginiana*  
*Andromeda arborea*  
*Andromeda mariana*  
*Andromeda paniculata*  
*Andropogon divaricatus*  
*Anemone quinquefolia*  
*Anemone thalictroides*  
*Anemone virginiana*  
*Antirrhinum canadense*  
*Apocynum androsaemifolium*  
*Apocynum cannabinum*  
*Aquilegia canadensis*  
*Aralia spinosa*  
*Arethusa bulbosa*  
*Arethusa ophioglossoides*  
*Aristolochia serpentaria*  
*Arum virginicum*  
*Asarum virginicum*  
*Asclepias decumbens*  
*Asclepias incarnata*  
*Asclepias rubra*  
*Asclepias syriaca*  
*Asclepias verticillata*  
*Ascyrum crux-andreae*  
*Ascyrum hypericoides*  
*Ascyrum villosum*  
*Aster concolor*  
*Aster divaricatus*  
*Aster novi-belgii*  
*Aster rigidus*  
*Aster tradescantii*  
*Aster vernus*  
*Astragalus canadensis*  
*Azalea lutea*  
*Azalea viscosa*  
*Baccharis foetida*  
*Baccharis halimifolia*  
*Bartsia coccinea*  
*Betula lenta*  
*Betula nigra*  
*Bidens bipinnata*  
*Bignonia sempervirens*  
*Buchnera americana*  
*Burmannia biflora*  
*Cacalia atriplicifolia*  
*Cacalia suaveolens*  
*Callicarpa americana*  
*Campanula perfoliata*  
*Cardamine virginica*  
*Carduus virginianus*  
*Cassia marilandica*  
*Cassia nictitans*  
*Ceanothus americanus*  
*Celastrus bullatus*  
*Celtis occidentalis*  
*Cenchrus tribuloides*  
*Cercis canadensis*  
*Chaerophyllum arborescens*  
*Chelone glabra*  
*Chelone hirsuta*  
*Chelone penstemon*  
*Chenopodium virginicum*  
*Chironia angularis*  
*Chironia dodecandra*  
*Chrysogonum virginianum*  
*Cicuta bulbifera*  
*Cicuta maculata*  
*Claytonia virginica*  
*Clematis viora*  
*Clethra alnifolia*  
*Clitoria virginiana*  
*Collinsonia canadensis*  
*Commelina erecta*  
*Convallaria racemosa*  
*Convolvulus panduratus*  
*Convolvulus spithameus*  
*Coreopsis alternifolia*  
*Coreopsis angustifolia*  
*Coreopsis auriculata*  
*Coreopsis tripteris*  
*Coreopsis verticillata*  
*Cornus florida*  
*Cracca virginiana*  
*Crataegus coccinea*  
*Crataegus tomentosa*  
*Crataegus viridis*  
*Cucubalus stellatus*  
*Cupressus distichia*  
*Cuscuta americana*  
*Cynoglossum virginianum*  
*Cyperus arundinacea*  
*Dianthera americana*  
*Diodia virginiana*  
*Dioscorea villosa*  
*Dirca palustris*  
*Dodecatheon meadia*  
*Dolichos polystachyus*  
*Dolichos regularis*  
*Dracontium foetidum*  
*Elephantopus tomentosus*



<i>Elymus virginicus</i>	<i>Hibiscus virginicus</i>
<i>Epigaea repens</i>	<i>Hieracium gronovii</i>
<i>Erigeron camphoratum</i>	<i>Hieracium venosum</i>
<i>Eriophorum virginicum</i>	<i>Holcus laxus</i>
<i>Eryngium aquaticum</i>	<i>Holcus striatus</i>
<i>Eupatorium aromaticum</i>	<i>Horminum virginicum</i>
<i>Eupatorium coelestinum</i>	<i>Houstonia caerulea</i>
<i>Eupatorium hyssopifolium</i>	<i>Houstonia purpurea</i>
<i>Eupatorium perfoliatum</i>	<i>Hydrangea arborescens</i>
<i>Eupatorium rotundifolium</i>	<i>Hydrophyllum virginianum</i>
<i>Eupatorium scandens</i>	<i>Hyoseris virginica</i>
<i>Eupatorium sessilifolium</i>	<i>Hypericum kalmianum</i>
<i>Eupatorium trifoliatum</i>	<i>Hypericum mutilum</i>
<i>Euphorbia corollata</i>	<i>Hypericum setosum</i>
<i>Euphorbia ipeacuanhae</i>	<i>Hyssopus nepetoides</i>
<i>Euphorbia polygonifolia</i>	<i>Ipomoea nyctelea</i>
<i>Euonymus americanus</i>	<i>Iris verna</i>
<i>Ferula canadensis</i>	<i>Iris versicolor</i>
<i>Fraxinus americana</i>	<i>Iris virginica</i>
<i>Fumaria cucullaria</i>	<i>Itea virginica</i>
<i>Fumaria sempervirens</i>	<i>Juglans alba</i>
<i>Galax aphylla</i>	<i>Juglans nigra</i>
<i>Galium bermudense</i>	<i>Juniperus virginiana</i>
<i>Gaura biennis</i>	<i>Jussiaea erecta</i>
<i>Gentiana saponaria</i>	<i>Kalmia latifolia</i>
<i>Gentiana villosa</i>	<i>Laurus aestivalis</i>
<i>Geranium carolinianum</i>	<i>Laurus benzoin</i>
<i>Gerardia flava</i>	<i>Laurus borbonica</i>
<i>Gerardia pedicularia</i>	<i>Laurus indica</i>
<i>Gerardia purpurea</i>	<i>Laurus sassafras</i>
<i>Geum virginianum</i>	<i>Leontice thalictroides</i>
<i>Gleditsia triacanthos</i>	<i>Leontodon dandelion</i>
<i>Glycine apios</i>	<i>Linum virginianum</i>
<i>Glycine bracteata</i>	<i>Lithospermum virginianum</i>
<i>Glycine comosa</i>	<i>Lobelia cardinalis</i>
<i>Glycine tomentosa</i>	<i>Lobelia cliffortiana</i>
<i>Gnaphalium obtusifolium</i>	<i>Lobelia inflata</i>
<i>Gnaphalium plantaginifolium</i>	<i>Lobelia siphilitica</i>
<i>Gnaphalium purpureum</i>	<i>Lonicera marilandica</i>
<i>Gratiola dubia</i>	<i>Lonicera symphoricarpos</i>
<i>Gratiola virginiana</i>	<i>Ludwigia alternifolia</i>
<i>Hamamelis virginiana</i>	<i>Lupinus perennis</i>
<i>Hedysarum canadense</i>	<i>Lycopodium alopecuroides</i>
<i>Hedysarum frutescens</i>	<i>Lycopodium apodum</i>
<i>Hedysarum hirtum</i>	<i>Lycopsis virginica</i>
<i>Hedysarum marilandicum</i>	<i>Lycopus virginicus</i>
<i>Hedysarum nudiflorum</i>	<i>Lysimachia ciliata</i>
<i>Hedysarum paniculatum</i>	<i>Lysimachia quadrifolia</i>
<i>Hedysarum repens</i>	<i>Lythrum lineare</i>
<i>Hedysarum violaceum</i>	<i>Lythrum petiolatum</i>
<i>Hedysarum virginicum</i>	<i>Lythrum verticillatum</i>
<i>Hedysarum viridiflorum</i>	<i>Magnolia virginiana</i>
<i>Helianthus angustifolius</i>	var. <i>acuminata</i>
<i>Helianthus atrorubens</i>	var. <i>foetida</i>
<i>Helianthus giganteus</i>	var. <i>glauca</i>
<i>Helianthus laevis</i>	var. <i>grisea</i>
<i>Helianthus multiflorus</i>	var. <i>tripetala</i>
<i>Heuchera americana</i>	<i>Medeola virginiana</i>
<i>Hibiscus moscheutos</i>	<i>Medicago virginica</i>
<i>Hibiscus palustris</i>	<i>Melanthium virginicum</i>

Melissa pulegioides	Polygala sanguinea
Menispermum canadense	Polygala senega
Menispermum virginicum	Polygala verticillata
Mespilus arbutifolia	Polygala viridescens
Mespilus canadensis	Polygonum arifolium
Mimulus ringens	Polygonum sagittatum
Mitchella repens	Polygonum virginianum
Monarda ciliata	Polypodium virginianum
Monarda clinopodia	Polypremum procumbens
Monarda punctata	Populus heterophylla
Monotropa uniflora	Pontederia cordata
Morus rubra	Prenanthes alba
Myosotis virginiana	Prenanthes altissima
Myrica cerifera	Prinos verticillatus
Napaea dioica	Proserpinaca palustris
Napaea hermaphrodita	Prunus virginiana
Napaea virginica	Ptelea trifoliata
Obalaria virginica	Pteris atropurpurea
Oenothera fruticosa	Pulmonaria virginica
Oldenlandia uniflora	Pyrus coronaria
Onoclea sensibilis	Quercus alba
Ophrys cernua	Quercus rubra
Orchis ciliaris	Queria canadensis
Orchis flava	Ranunculus abortivus
Orchis spectabilis	Rhexia virginica
Ornithogalum bivale	Rhinanthus virginica
Ornithogalum hirsutum	Rhododendron maximum
Orobanche uniflora	Rhus radicans
Orobanche virginiana	Rhus toxicodendron
Orontium aquaticum	Robinia pseudoacacia
Osmunda claytoniana	Rudbeckia hirta
Osteospermum uvedalia	Rudbeckia laciniata
Oxalis longiflora	Rudbeckia oppositifolia
Oxalis stricta	Rudbeckia purpurea
Oxalis violacea	Rudbeckia triloba
Panax quinquefolius	Ruellia strepens
Panax trifolius	Rumex britannica
Panicum dichotomum	Rumex persicarioides
Panicum virgatum	Rumex sanguineus
Parthenium integrifolium	Rumex verticillatus
Penthorum sedoides	Sagina virginica
Phalaris oryzoides	Salvia lyrata
Phlox divaricata	Salvia urticifolia
Phlox glaberrima	Sambucus canadensis
Phlox maculata	Sanicula canadensis
Phlox ovata	Sanicula marilandica
Phlox pilosa	Sarothra gentianoides
Phlox setacea	Satureja origanoides
Phlox subulata	Satureja virginiana
Pinus balsamea	Saururus cernuus
Pinus strobus	Saxifraga pensylvanica
Pinus taeda	Scandix procumbens
Plantago virginica	Schoenus glomeratus
Poa capillaris	Scirpus capitatus
Poa flava	Scirpus retrofractus
Podophyllum diphyllum	Scrophularia marilandica
Polemonium dubium	Scutellaria hyssopifolia
Polygala cruciata	Scutellaria integrifolia
Polygala incarnata	Scutellaria lateriflora
Polygala lutea	Senecio aureus



*Serratula glauca*  
*Serratula praealta*  
*Serratula scariosa*  
*Serratula squarrosa*  
*Sigesbeckia occidentalis*  
*Silene antirrhina*  
*Silene virginica*  
*Silphium asteriscus*  
*Silphium helianthoides*  
*Silphium solidaginoides*  
*Silphium trifoliatum*  
*Sium rigidius*  
*Smilax herbacea*  
*Smilax lanceolata*  
*Smilax laurifolia*  
*Smilax tamnoides*  
*Smyrnum integrirum*  
*Solidago canadensis*  
*Sonchus floridanus*  
*Spiraea opulifolia*  
*Spiraea trifoliata*  
*Staphylea trifolia*  
*Stewartia malacodendron*  
*Stipa avenacea*  
*Swertia difformis*  
*Tetragonotheca helianthoides*  
*Teucrium virginicum*  
*Thaspia trifoliata*  
*Thesium umbellatum*  
*Tilia americana*  
*Tradescantia virginiana*  
*Tragopogon virginicum*  
*Trichostema dichotomum*  
*Trifolium biflorum*  
*Trifolium reflexum*  
*Trillium erectum*  
*Trillium sessile*  
*Triosteum angustifolium*  
*Ulmus americana*  
*Urtica divaricata*  
*Utricularia gibba*  
*Utricularia subulata*  
*Uvularia perfoliata*  
*Vaccinium hispidulum*  
*Veratrum luteum*  
*Verbena nodiflora*  
*Verbena spuria*  
*Verbena urticifolia*  
*Verbesina virginica*  
*Veronica marilandica*  
*Veronica virginica*  
*Viburnum acerifolium*  
*Viburnum dentatum*  
*Viburnum nudum*  
*Viburnum prunifolium*  
*Viola palmata*  
*Viola pedata*  
*Vitis arborea*  
*Vitis vulpina*  
*Yucca filamentosa*

**Vascular Plants from Temperate  
 North America Mentioned in  
 Linnaeus' First Edition of  
 Species Plantarum as Occurring  
 only in the New World**

*Acrostichum polypodioides*  
*Aesculus pavia*  
*Andropogon nutans*  
*Annona muricata*  
*Arum triphyllum*  
*Asclepias nivea*  
*Baccharis ivaefolia*  
*Bignonia crucigera*  
*Buphthalmum frutescens*  
*Caesalpinia brasiliensis*  
*Cassia chamaecrista*  
*Cassia ligustrina*  
*Celastrus myrtifolius*  
*Chenopodium anthelminticum*  
*Crescentia cujete*  
*Crotalaria sagittalis*  
*Cynanchum suberosum*  
*Cyperus strigosus*  
*Eryngium foetidum*  
*Hedysarum canescens*  
*Hypericum lasianthus*  
*Iva frutescens*  
*Laurus winterana*  
*Lepidium virginicum*  
*Liquidambar styraciflua*  
*Lonicera sempervirens*  
*Melothria pendula*  
*Pancratium carolinianum*  
*Panicum capillare*  
*Panicum clandestinum*  
*Passiflora incarnata*  
*Passiflora lutea*  
*Physalis viscosa*  
*Phytolacca americana*  
*Pistacia simaruba*  
*Renealmia usneoides*  
*Sicyos angulata*  
*Sida crispa*  
*Sisyrinchium bermudiana*  
*Smilax pseudo-china*  
*Smilax sarsaparilla*  
*Solanum mammosum*  
*Sophora tinctoria*  
*Tetracera volubilis*  
*Urtica cylindrica*  
*Verbesina alba*  
*Yucca gloriosa*

**Vascular Plants from Temperate  
 North America Mentioned in  
 Linnaeus' First Edition of  
 Species Plantarum as Occurring  
 in Temperate North America and  
 Elsewhere in the World**

*Acalypha virginica*  
*Andromeda calyculata*  
*Anemone dichotoma*  
*Aralia nudicaulis*  
*Arbutus uva-ursi*  
*Arnica maritima*  
*Asplenium rhizophyllum*  
*Aster cordifolius*  
*Atriplex laciniata*  
*Bunias cakile*  
*Cactus opuntia*  
*Carpinus betulus*  
*Carpinus ostrya*  
*Cassine peragua*  
*Chelidonium glaucium*  
*Chrysanthemum arcticum*  
*Chrysoplenium oppositifolium*  
*Clematis vitalba*  
*Clinopodium rugosum*  
*Clinopodium vulgare*  
*Convolvulus hederaceus*  
*Cornus sanguinea*  
*Cynosurus aegyptius*  
*Cypripedium calceolus*  
*Dactylis cynosuroides*  
*Datura stramonium*  
*Dianthus plumarius*  
*Drosera rotundifolia*  
*Erigeron canadense*  
*Erythronium dens-canis*  
*Gentiana ciliata*  
*Geranium maculatum*  
*Gnaphalium margaritaceum*  
*Helleborus trifolius*  
*Hypericum ascyron*  
*Ilex aquifolium*  
*Impatiens noli-tangere*  
*Isnardia palustris*  
*Juncus bulbosus*  
*Lilium camschatcense*  
*Linnaea borealis*  
*Lycopodium complanatum*  
*Lycopodium rupestre*  
*Melica altissima*  
*Mollugo verticillata*  
*Monotropa hypopithys*  
*Nicotiana rustica*  
*Nymphaea alba*  
*Nymphaea lotus*  
*Oenothera biennis*  
*Ophrys lilifolia*  
*Origanum vulgare*  
*Panicum crusgalli*  
*Panicum sanguinale*  
*Poa compressa*  
*Polemonium caeruleum*  
*Polygonum maritimum*  
*Polypodium lonchitis*  
*Polypodium phegopteris*  
*Portulaca oleracea*

*Potentilla norvegica*  
*Prunus lusitanica*  
*Pyrola rotundifolia*  
*Pyrola umbellata*  
*Rhus vernix*  
*Ribes nigrum*  
*Sagittaria sagittifolia*  
*Salicornia virginica*  
*Samolus valerandii*  
*Saxifraga nivalis*  
*Scirpus glomeratus*  
*Serratula noveboracensis*  
*Silene nocturna*  
*Sisymbrium nasturtium-aquaticum*  
*Statice armeria*  
*Statice limonium*  
*Swertia corniculata*  
*Taxus baccata*  
*Thuja occidentalis*  
*Tiarella cordifolia*  
*Trifolium arvense*  
*Urtica canadensis*  
*Valeriana cornucopiae*  
*Veronica serpyllifolium*  
*Viola primulifolia*  
*Xanthium strumarium*

**Vascular Plants from Temperate  
 North America Mentioned in  
 Linnaeus' First Edition of  
 Species Plantarum as Occurring  
 Elsewhere but not Temperate  
 North America**

*Agrimonia eupatoria*  
*Alsine media*  
*Amaranthus spinosus*  
*Andropogon hirtum*  
*Anemone hepatica*  
*Angelica sylvestris*  
*Anthericum calyculatum*  
*Antirrhinum elatine*  
*Aphanes arvensis*  
*Arenaria rubra var. marina*  
*Arundo phragmites*  
*Atriplex halimus*  
*Betonica annua*  
*Bignonia catalpa*  
*Briza eragrostis*  
*Callitriche palustris*  
*Caltha palustris*  
*Carex pseudocyperus*  
*Cerastium semidecandrum*  
*Chenopodium album*  
*Clinopodium incanum*  
*Coix lacryma-jobi*  
*Convallaria polygonatum*  
*Daucus carota*  
*Dipsacus fullonum*  
*Draba verna*  
*Elatine hydropiper*



*Elephantopus scaber*  
*Epilobium hirsutum*  
*Equisetum arvense*  
*Equisetum hyemale*  
*Heliotropium indicum*  
*Juncus campestris*  
*Juncus effusus*  
*Juncus filiformis*  
*Lamium amplexicaule*  
*Ligusticum scothieum*  
*Lysimachia punctata*  
*Melissa nepeta*  
*Mentha spicata* var. *viridis*  
*Nymphaea lutea*  
*Nymphaea nelumbo*  
*Oenothera mollissima*  
*Ophiorrhiza mitreola*  
*Osmunda regalis*  
*Panicum dissectum*  
*Panicum glaucum*  
*Panicum italicum*  
*Physalis pubescens*  
*Polygonum aviculare*  
*Polygonum convolvulus*  
*Polygonum persicaria*  
*Populus nigra*  
*Potamogeton nutans*  
*Potentilla reptans*  
*Ranunculus repens*  
*Rubus caesius*  
*Rubus fruticosus*  
*Rumex acetosella*  
*Salsola kali*  
*Salsola prostrata*  
*Sanicula europaea*  
*Saponaria officinalis*  
*Scandix cerefolium*  
*Scirpus spadiceus*  
*Scrophularia nodosa*  
*Sida abutilon*  
*Sida rhombifolia*  
*Sida spinosa*  
*Solanum nigrum* var. *vulgare*  
*Sparganium erectum*  
*Spiraea aruncus*  
*Teucrium chamaepitys*  
*Trifolium repens*  
*Veronica anagallis-aquatica*  
*Veronica arvensis*  
*Veronica beccabunga*  
*Vitex agnus-castus*  
*Vitis vinifera*  
*Xyris indica*

**Vascular Plants Named for  
 Certain Geographical Areas in  
 Temperate North America by  
 Linnaeus in the First Edition  
 of Species Plantarum  
 America**

*Buchnera americana*  
*Callicarpa americana*  
*Campanula americana*  
*Ceanothus americanus*  
*Cuscuta americana*  
*Dianthera americana*  
*Euonymus americanus*  
*Fraxinus americana*  
*Heuchera americana*  
*Hydrocotyle americana*  
*Phytolacca americana*  
*Schwalbea americana*  
*Tilia americana*  
*Ulmus americana*

#### Canada

*Allium canadense*  
*Antirrhinum canadense*  
*Aquilegia canadensis*  
*Arabis canadensis*  
*Asarum canadense*  
*Astragalus canadensis*  
*Cercis canadensis*  
*Circaea lutetiana*  
     var. *canadensis*  
*Cistus canadensis*  
*Collinsonia canadensis*  
*Cornus canadensis*  
*Elymus canadensis*  
*Erigeron canadense*  
*Ferula canadensis*  
*Hippophae canadensis*  
*Hypericum canadense*  
*Lactuca canadensis*  
*Lilium canadense*  
*Menispermum canadense*  
*Mentha canadensis*  
*Mespilus canadensis*  
*Ornithogalum canadense*  
*Polymnia canadensis*  
*Potentilla canadensis*  
*Queria canadensis*  
*Rubus canadensis*  
*Sambucus canadensis*  
*Sanguinaria canadensis*  
*Sanguisorba canadensis*  
*Sanicula canadensis*  
*Senecio canadensis*  
*Sison canadense*  
*Solidago canadensis*  
*Sonchus canadensis*  
*Teucrium canadense*  
*Urtica canadensis*  
*Viola canadensis*

#### Carolina

*Astragalus carolinianus*  
*Convolvulus carolinus*  
*Geranium carolinanum*  
*Ipomoea carolina*

*Lycopodium carolinianum*  
*Malva caroliniana*  
*Menispermum carolinum*  
*Pancratium carolinianum*  
*Rosa carolina*  
*Solanum carolinense*

#### Florida

*Sonchus floridanus*

#### Maryland

*Andromeda mariana*  
*Cassia marilandica*  
*Clitoria mariana*  
*Hedysarum marilandicum*  
*Lonicera marilandica*  
*Rhexia mariana*  
*Sanicula marilandica*  
*Scrophularia marilandica*  
*Veronica marilandica*

#### New England

*Aster novae-angliae*

#### New York

*Aster novi-belgii*  
*Polypodium noveboracense*  
*Serratula noveboracensis*  
*Solidago noveboracensis*

#### Pennsylvania

*Acer pensylvanicum*  
*Avena pensylvanica*  
*Erigeron philadelphicus*  
*Polygonum pensylvanicum*  
*Saxifraga pensylvanica*

#### Virginia

*Acalypha virginica*  
*Agave virginica*  
*Agrostis virginica*  
*Anchusa virginiana*  
*Andropogon virginicum*  
*Anemone virginiana*  
*Arum virginicum*  
*Asarum virginicum*  
*Cardamine virginica*  
*Carduus virginianus*  
*Chenopodium virginicum*  
*Chionanthus virginica*  
*Chrysogonum virginianum*  
*Claytonia virginica*  
*Clitoria virginiana*  
*Cracca virginiana*  
*Cynoglossum virginianum*  
*Diodia virginiana*  
*Diospyros virginiana*  
*Dracocephalum virginianum*  
*Elymus virginicus*  
*Eriophorum virginicum*

*Geum virginianum*  
*Gratiola virginiana*  
*Hamamelis virginiana*  
*Hedysarum virginicum*  
*Hibiscus virginicus*  
*Hydrophyllum virginianum*  
*Hyoseris virginica*  
*Iris virginica*  
*Itea virginica*  
*Juniperus virginiana*  
*Lepidium virginicum*  
*Linum virginianum*  
*Lithospermum virginianum*  
*Lycopsis virginica*  
*Lycopus virginicus*  
*Magnolia virginiana*  
*Medeola virginiana*  
*Medicago virginica*  
*Melanthium virginicum*  
*Menispermum virginicum*  
*Myosotis virginiana*  
*Nepeta virginica*  
*Obolaria virginica*  
*Orobanche virginiana*  
*Osmunda virginiana*  
*Plantago virginica*  
*Polygonum virginianum*  
*Polypodium virginianum*  
*Prunus virginiana*  
*Pulmonaria virginica*  
*Rhexia virginica*  
*Rhinanthus virginica*  
*Sagina virginica*  
*Salicornia virginica*  
*Satureja virginiana*  
*Silene virginica*  
*Solanum virginianum*  
*Teucrium virginicum*  
*Tradescantia virginiana*  
*Tragopogon virginicum*  
*Verbesina virginica*

#### Collection Numbers and Species of Vascular Plants Gathered by John Clayton and Indirectly Reported in Linnaeus' First Edition of Species Plantarum

201 *Acalypha virginica*  
 530 *Acer negundo*  
 000 *Acer rubrum*  
 599 *Acnida cannabina*  
 011 *Acrostichum areolatum*  
 014 *Acrostichum platyneuros*  
 685 *Acrostichum polypodioides*  
 305 *Actaea racemosa*  
 320 *Adiantum pedatum*  
 321 *Adiantum pedatum*  
 498 *Agave virginica*  
 199 *Ageratum altissimum*

000	<i>Agrimonia eupatoria</i>	230	<i>Ascyrum hypericoides</i>
000	<i>Agrostis virginica</i>	607	<i>Aster concolor</i>
507	<i>Agrostis virginica</i>	143	<i>Aster divaricatus</i>
074	<i>Aletris farinosa</i>	767	<i>Aster divaricatus</i>
723	<i>Alisma subulata</i>	072	<i>Aster dumosus</i>
529	<i>Alsine media</i>	194	<i>Aster ericoides</i>
442	<i>Amaranthus graecizans</i>	239	<i>Aster grandiflorus</i>
000	<i>Amaranthus lividus</i>	072	<i>Aster linifolius</i>
569	<i>Amaranthus spinosus</i>	244	<i>Aster novae-angliae</i>
256	<i>Amaryllis atamasca</i>	009	<i>Aster rigidus</i>
512	<i>Ambrosia elatior</i>	391	<i>Aster vernus</i>
724	<i>Ambrosia trifida</i>	565	<i>Astragalus canadensis</i>
774	<i>Ammannia ramosior</i>	571	<i>Atriplex halimus</i>
304	<i>Anchusa virginiana</i>	000	<i>Atriplex laciniata</i>
000	<i>Andromeda arborea</i>	052	<i>Azalea lutea</i>
000	<i>Andromeda calyculata</i>	032	<i>Azalea viscosa</i>
030	<i>Andromeda mariana</i>	159	<i>Baccharis foetida</i>
073	<i>Andromeda paniculata</i>	240	<i>Baccharis halimifolia</i>
601	<i>Andropogon alopecuroides</i>	293	<i>Bartsia coccinea</i>
070	<i>Andropogon divaricatum</i>	271	<i>Betonica annua</i>
600	<i>Andropogon divaricatum</i>	000	<i>Betula lenta</i>
602	<i>Andropogon hirtum</i>	688	<i>Betula nigra</i>
621	<i>Andropogon nutans</i>	100	<i>Bignonia crucigera</i>
460	<i>Andropogon virginicum</i>	225	<i>Bignonia radicans</i>
606	<i>Andropogon virginicum</i>	582	<i>Briza eragrostis</i>
328	<i>Anemone hepatica</i>	142	<i>Buchnera americana</i>
294	<i>Anemone thalictroides</i>	732	<i>Bunias cakile</i>
529	<i>Anemone virginiana</i>	242	<i>Buphthalmum frutescens</i>
125	<i>Angelica sylvestris</i>	208	<i>Buphthalmum helianthoides</i>
058	<i>Annona muricata</i>	248	<i>Burmannia biflora</i>
269	<i>Anthericum calyculatum</i>	133	<i>Cacalia atriplicifolia</i>
256	<i>Antirrhinum canadense</i>	099	<i>Cactus opuntia</i>
435	<i>Antirrhinum elatine</i>	000	<i>Callicarpa americana</i>
374	<i>Aphanes arvensis</i>	378	<i>Callitriche palustris</i>
438	<i>Apocynum cannabinum</i>	522	<i>Caltha palustris</i>
338	<i>Aquilegia canadensis</i>	020	<i>Campanula perfoliata</i>
400	<i>Arabis canadensis</i>	462	<i>Cardamine virginica</i>
745	<i>Arabis canadensis</i>	193	<i>Carduus virginianus</i>
056	<i>Arabis lyrata</i>	259	<i>Carex pseudocyperus</i>
394	<i>Arabis lyrata</i>	000	<i>Carpinus ostrya</i>
042	<i>Aralia nudicaulis</i>	156	<i>Cassia chamaecrista</i>
233	<i>Aralia spinosa</i>	146	<i>Cassia ligustrina</i>
475	<i>Arenaria rubra</i> var. <i>marina</i>	069	<i>Ceanothus americanus</i>
000	<i>Arethusa bulbosa</i>	311	<i>Ceanothus americanus</i>
472	<i>Arethusa bulbosa</i>	000	<i>Celastrus scandens</i>
635	<i>Arethusa divaricata</i>	576	<i>Celosia paniculata</i>
077	<i>Arethusa ophioglossoides</i>	624	<i>Celtis occidentalis</i>
000	<i>Aristolochia serpentaria</i>	206	<i>Cenchrus tribuloides</i>
066	<i>Arum triphyllum</i>	106	<i>Cephalanthus occidentalis</i>
228	<i>Arum virginicum</i>	342	<i>Cerastium semidecandrum</i>
581	<i>Arundo phragmites</i>	000	<i>Cercis canadensis</i>
288	<i>Asarum canadense</i>	276	<i>Chelidonium glaucium</i>
704	<i>Asarum virginicum</i>	010	<i>Chelone glabra</i>
083	<i>Asclepias decumbens</i>	039	<i>Chelone hirsuta</i>
222	<i>Asclepias incarnata</i>	000	<i>Chenopodium album</i>
065	<i>Asclepias nivea</i>	046	<i>Chionanthus virginica</i>
263	<i>Asclepias rubra</i>	120	<i>Chironia dodecandra</i>
000	<i>Asclepias syriaca</i>	298	<i>Chrysogonum virginianum</i>
216	<i>Asclepias verticillata</i>	215	<i>Cicuta bulbifera</i>
		013	<i>Cicuta maculata</i>



- |                                    |                                       |
|------------------------------------|---------------------------------------|
| 123 <i>Cicuta maculata</i>         | 439 <i>Eriocaulon decangulare</i>     |
| 251 <i>Claytonia virginica</i>     | 461 <i>Eriophorum virginicum</i>      |
| 411 <i>Clematis virgna</i>         | 500 <i>Eryngium aquaticum</i>         |
| 270 <i>Clematis vitalba</i>        | 282 <i>Eryngium foetidum</i>          |
| 112 <i>Clitoria virginiana</i>     | 691 <i>Erythronium dens-canis</i>     |
| 067 <i>Coix lacryma-jobi</i>       | 603 <i>Eupatorium aromaticum</i>      |
| 093 <i>Commelina communis</i>      | 179 <i>Eupatorium coelestinum</i>     |
| 093 <i>Commelina erecta</i>        | 000 <i>Eupatorium perfoliatum</i>     |
| 335 <i>Convallaria polygonatum</i> | 162 <i>Eupatorium purpureum</i>       |
| 035 <i>Convallaria racemosa</i>    | 147 <i>Eupatorium scandens</i>        |
| 504 <i>Convolvulus hederaceus</i>  | 620 <i>Eupatorium trifoliatum</i>     |
| 641 <i>Convolvulus panduratus</i>  | 155 <i>Euphorbia corollata</i>        |
| 665 <i>Convolvulus repens</i>      | 000 <i>Euphorbia ipecacuanhae</i>     |
| 553 <i>Convolvulus spithameus</i>  | 152 <i>Euphorbia polygonifolia</i>    |
| 667 <i>Coreopsis angustifolia</i>  | 075 <i>Euonymus americanus</i>        |
| 298 <i>Coreopsis auriculata</i>    | 000 <i>Fagus pumila</i>               |
| 308 <i>Coreopsis verticillata</i>  | 548 <i>Ferula canadensis</i>          |
| 057 <i>Cornus florida</i>          | 000 <i>Fraxinus americana</i>         |
| 102 <i>Cracca virginiana</i>       | 625 <i>Fumaria cucullaria</i>         |
| 043 <i>Crataegus coccinea</i>      | 004 <i>Galax aphylla</i>              |
| 000 <i>Crataegus crus-galli</i>    | 313 <i>Galium bermudense</i>          |
| 055 <i>Crataegus tomentosa</i>     | 010 <i>Gentiana saponaria</i>         |
| 526 <i>Crataegus viridis</i>       | 605 <i>Gentiana villosa</i>           |
| 126 <i>Crotalaria sagittalis</i>   | 372 <i>Geranium carolinianum</i>      |
| 245 <i>Cucubalus stellatus</i>     | 307 <i>Geranium maculatum</i>         |
| 384 <i>Cupressus distichia</i>     | 009 <i>Gerardia flava</i>             |
| 215 <i>Cuscuta americana</i>       | 192 <i>Gerardia pedicularia</i>       |
| 001 <i>Cynanchum suberosum</i>     | 000 <i>Gerardia purpurea</i>          |
| 223 <i>Cynanchum suberosum</i>     | 199 <i>Geum virginianum</i>           |
| 257 <i>Cynoglossum virginianum</i> | 000 <i>Gleditsia triacanthos</i>      |
| 562 <i>Cyperus arundinacea</i>     | 127 <i>Glycine apios</i>              |
| 509 <i>Cyperus odoratus</i>        | 592 <i>Glycine bracteata</i>          |
| 040 <i>Cypripedium calceolus</i>   | 182 <i>Glycine comosa</i>             |
| 577 <i>Dactylis cynosuroides</i>   | 113 <i>Glycine tomentosa</i>          |
| 583 <i>Dactylis cynosuroides</i>   | 203 <i>Gnaphalium obtusifolium</i>    |
| 000 <i>Datura stramonium</i>       | 287 <i>Gnaphalium plantaginifolia</i> |
| 444 <i>Daucus carota</i>           | 385 <i>Gnaphalium purpureum</i>       |
| 408 <i>Dianthera americana</i>     | 164 <i>Gratiola dubia</i>             |
| 277 <i>Diodia virginiana</i>       | 594 <i>Gratiola dubia</i>             |
| 094 <i>Dioscorea villosa</i>       | 379 <i>Gratiola virginiana</i>        |
| 080 <i>Diospyros virginiana</i>    | 544 <i>Hamamelis virginiana</i>       |
| 632 <i>Diospyros virginiana</i>    | 673 <i>Hamamelis virginiana</i>       |
| 267 <i>Dipsacus fullonum</i>       | 116 <i>Hedera quinquefolia</i>        |
| 000 <i>Dirca palustris</i>         | 209 <i>Hedysarum canescens</i>        |
| 568 <i>Dolichos polystachyus</i>   | 174 <i>Hedysarum frutescens</i>       |
| 121 <i>Dolichos regularis</i>      | 510 <i>Hedysarum hirtum</i>           |
| 525 <i>Draba verna</i>             | 516 <i>Hedysarum marilandicum</i>     |
| 017 <i>Dracontium foetidum</i>     | 124 <i>Hedysarum nudiflorum</i>       |
| 003 <i>Drosera rotundifolia</i>    | 184 <i>Hedysarum paniculatum</i>      |
| 646 <i>Elatine hydropiper</i>      | 085 <i>Hedysarum repens</i>           |
| 655 <i>Elephantopus scaber</i>     | 103 <i>Hedysarum violaceum</i>        |
| 148 <i>Elephantopus tomentosus</i> | 564 <i>Hedysarum virginicum</i>       |
| 446 <i>Elymus virginicus</i>       | 614 <i>Hedysarum virginicum</i>       |
| 250 <i>Epigaea repens</i>          | 190 <i>Hedysarum viridiflorum</i>     |
| 586 <i>Epilobium hirsutum</i>      | 202 <i>Helenium autumnale</i>         |
| 341 <i>Equisetum arvense</i>       | 013 <i>Helianthus angustifolius</i>   |
| 657 <i>Equisetum hyemale</i>       | 136 <i>Helianthus atrorubens</i>      |
| 165 <i>Erigeron camphoratum</i>    | 109 <i>Helianthus giganteus</i>       |
| 449 <i>Erigeron canadense</i>      | 195 <i>Helianthus laevis</i>          |
| 234 <i>Eriocaulon decangulare</i>  | 301 <i>Heuchera americana</i>         |

- 424 *Heuchera americana*  
 122 *Hibiscus moscheutos*  
 567 *Hibiscus virginicus*  
 447 *Hieracium gronovii*  
 386 *Hieracium venosum*  
 589 *Holcus laxus*  
 590 *Holcus striatus*  
 060 *Houstonia caerulea*  
 063 *Houstonia purpurea*  
 079 *Hydrangea arborescens*  
 429 *Hydrocotyle umbellata*  
 249 *Hydrophyllum virginianum*  
 376 *Hyoseris virginica*  
 552 *Hypericum canadense*  
 232 *Hypericum mutilum*  
 135 *Hypericum setosum*  
 168 *Hyssopus nepetoides*  
 000 *Ilex aquifolium*  
 253 *Iris verna*  
 259 *Iris virginica*  
 480 *Itea virginica*  
 556 *Itea virginica*  
 243 *Iva frutescens*  
 000 *Juglans alba*  
 000 *Juglans nigra*  
 340 *Juncus bulbosus*  
 332 *Juncus campestris*  
 393 *Juncus effusus*  
 580 *Juncus filiformis*  
 884 *Juniperus virginiana*  
 021 *Kalmia angustifolia*  
 331 *Lamium amplexicaule*  
 000 *Laurus aestivalis*  
 520 *Laurus aestivalis*  
 054 *Laurus benzoin*  
 000 *Laurus borbonia*  
 485 *Laurus indica*  
 056 *Laurus sassafra*  
 610 *Lechea minor*  
 545 *Leontice thalictroides*  
 019 *Leontodon dandelion*  
 383 *Leontodon dandelion*  
 000 *Lepidium virginicum*  
 307 *Ligusticum scothieum*  
 076 *Limodorum tuberosum*  
 440 *Linum virginianum*  
 000 *Liquidambar styraciflua*  
 487 *Liquidambar styraciflua*  
 531 *Liquidambar styraciflua*  
 016 *Liriodendron tulipifera*  
 647 *Lithospermum virginianum*  
 005 *Lobelia cardinalis*  
 196 *Lobelia cliffortiana*  
 000 *Lonicera marilandica*  
 201 *Lonicera symphoricarpos*  
 281 *Lonicera symphoricarpos*  
 137 *Ludwigia alternifolia*  
 000 *Lupinus perennis*  
 027 *Lycopodium alopecuroides*  
 000 *Lycopsis virginica*  
 185 *Lycopus virginicus*  
 433 *Lysimachia punctata*  
 419 *Lysimachia quadrifolia*  
 505 *Lythrum lineare*  
 418 *Lythrum petiolatum*  
 214 *Lythrum verticillatum*  
 034 *Magnolia virginiana*  
 404 *Magnolia virginiana*  
     var. *acuminata*  
 024 *Magnolia virginiana*  
     var. *foetida*  
 022 *Medeola virginiana*  
 191 *Medicago virginica*  
 422 *Melanthium virginicum*  
 198 *Melissa nepeta*  
 514 *Melissa pulegioides*  
 134 *Melothria pendula*  
 546 *Menispermum canadense*  
 425 *Menispermum virginicum*  
 654 *Mentha spicata* var. *viridis*  
 060 *Mespilus canadensis*  
 295 *Mespilus canadensis*  
 130 *Mimulus ringens*  
 028 *Mitchella repens*  
 399 *Mollugo verticillata*  
 412 *Monarda ciliata*  
 212 *Monarda clinopodia*  
 140 *Monarda punctata*  
 245 *Monotropa uniflora*  
 111 *Myosotis virginiana*  
 684 *Myrica asplenifolia*  
 719 *Myrica asplenifolia*  
 000 *Myrica cerifera*  
 437 *Nepeta virginica*  
 000 *Nyssa aquatica*  
 049 *Nyssa aquatica*  
 286 *Obolaria virginica*  
 000 *Oenothera biennis*  
 036 *Oenothera fruticosa*  
 333 *Oenothera fruticosa*  
 200 *Oenothera mollissima*  
 587 *Oldenlandia uniflora*  
 674 *Onoclea sensibilis*  
 714 *Onoclea sensibilis*  
 187 *Ophiorrhiza mitreola*  
 658 *Ophrys lilifolia*  
 708 *Ophrys lilifolia*  
 560 *Orchis ciliaris*  
 639 *Orchis flava*  
 668 *Orchis psychodes*  
 260 *Orchis spectabilis*  
 310 *Origanum vulgare*  
 044 *Ornithogalum bivale*  
 000 *Ornithogalum hirsutum*  
 387 *Orobanche uniflora*  
 604 *Orobanche virginiana*  
 053 *Orontium aquaticum*  
 000 *Osmunda claytoniana*  
 011 *Osmunda regalis*  
 008 *Osmunda virginiana*

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|-----|---------------------------------|-----|--------------------------------|
| 138 | <i>Osteospermum uvedalia</i>    | 339 | <i>Pulmonaria virginica</i>    |
| 221 | <i>Osteospermum uvedalia</i>    | 088 | <i>Pyrola maculata</i>         |
| 741 | <i>Oxalis longiflora</i>        | 000 | <i>Pyrus coronaria</i>         |
| 474 | <i>Oxalis stricta</i>           | 000 | <i>Quercus alba</i>            |
| 000 | <i>Oxalis violacea</i>          | 467 | <i>Quercus alba</i>            |
| 000 | <i>Panax quinquefolius</i>      | 000 | <i>Quercus nigra</i>           |
| 329 | <i>Panax trifolius</i>          | 000 | <i>Quercus phellos</i>         |
| 454 | <i>Panicum capillare</i>        | 000 | <i>Quercus prinus</i>          |
| 458 | <i>Panicum dichotomum</i>       | 000 | <i>Quercus rubra</i>           |
| 579 | <i>Panicum glaucum</i>          | 316 | <i>Queria canadensis</i>       |
| 591 | <i>Panicum italicum</i>         | 317 | <i>Queria canadensis</i>       |
| 457 | <i>Panicum sanguinale</i>       | 701 | <i>Ranunculus abortivus</i>    |
| 578 | <i>Panicum virgatum</i>         | 473 | <i>Ranunculus repens</i>       |
| 606 | <i>Panicum virgatum</i>         | 710 | <i>Ranunculus repens</i>       |
| 263 | <i>Parthenium integrifolium</i> | 389 | <i>Renealmia usneoides</i>     |
| 151 | <i>Passiflora incarnata</i>     | 227 | <i>Rhexia virginica</i>        |
| 118 | <i>Passiflora lutea</i>         | 488 | <i>Rhinanthus virginica</i>    |
| 158 | <i>Penthorum sedoides</i>       | 728 | <i>Rhus copallinum</i>         |
| 595 | <i>Phalaris oryzoides</i>       | 492 | <i>Rhus glabra</i>             |
| 297 | <i>Phlox glaberrima</i>         | 238 | <i>Rhus radicans</i>           |
| 129 | <i>Phryma leptostachya</i>      | 000 | <i>Rhus toxicodendron</i>      |
| 128 | <i>Physalis viscosa</i>         | 479 | <i>Rhus toxicodendron</i>      |
| 671 | <i>Phytolacca americana</i>     | 681 | <i>Rhus vernix</i>             |
| 547 | <i>Pinus balsamea</i>           | 050 | <i>Robinia pseudoacacia</i>    |
| 496 | <i>Pinus taeda</i>              | 634 | <i>Rubus caesius</i>           |
| 343 | <i>Plantago virginica</i>       | 703 | <i>Rubus fruticosus</i>        |
| 000 | <i>Platanus occidentalis</i>    | 490 | <i>Rudbeckia hirta</i>         |
| 471 | <i>Platanus occidentalis</i>    | 539 | <i>Rudbeckia laciniata</i>     |
| 580 | <i>Poa capillaris</i>           | 609 | <i>Rudbeckia oppositifolia</i> |
| 581 | <i>Poa capillaris</i>           | 417 | <i>Rudbeckia purpurea</i>      |
| 273 | <i>Poa flava</i>                | 490 | <i>Rudbeckia purpurea</i>      |
| 255 | <i>Podophyllum peltatum</i>     | 657 | <i>Rudbeckia triloba</i>       |
| 249 | <i>Polemonium caeruleum</i>     | 085 | <i>Ruellia strepens</i>        |
| 556 | <i>Polemonium dubium</i>        | 098 | <i>Ruellia strepens</i>        |
| 157 | <i>Polygala cruciata</i>        | 494 | <i>Rumex acetosella</i>        |
| 414 | <i>Polygala senega</i>          | 000 | <i>Rumex britannica</i>        |
| 563 | <i>Polygala verticillata</i>    | 000 | <i>Rumex verticillatus</i>     |
| 000 | <i>Polygala viridescens</i>     | 649 | <i>Sagina virginica</i>        |
| 382 | <i>Polygonum aviculare</i>      | 278 | <i>Sagittaria sagittifolia</i> |
| 000 | <i>Polygonum convolvulus</i>    | 527 | <i>Salicornia virginica</i>    |
| 670 | <i>Polygonum persicaria</i>     | 667 | <i>Salicornia virginica</i>    |
| 672 | <i>Polygonum persicaria</i>     | 432 | <i>Salsola kali</i>            |
| 000 | <i>Polygonum sagittatum</i>     | 019 | <i>Salvia lyrata</i>           |
| 000 | <i>Polygonum scandens</i>       | 391 | <i>Salvia lyrata</i>           |
| 183 | <i>Polygonum virginianum</i>    | 292 | <i>Salvia urticifolia</i>      |
| 322 | <i>Polypodium lonchitis</i>     | 314 | <i>Samolus valerandii</i>      |
| 768 | <i>Polypremum procumbens</i>    | 247 | <i>Sanguinaria canadensis</i>  |
| 087 | <i>Pontederia cordata</i>       | 000 | <i>Sanicula canadensis</i>     |
| 532 | <i>Populus heterophylla</i>     | 000 | <i>Sanicula europaea</i>       |
| 679 | <i>Populus nigra</i>            | 028 | <i>Sanicula marilandica</i>    |
| 410 | <i>Portulaca oleracea</i>       | 660 | <i>Saponaria officinalis</i>   |
| 664 | <i>Potamogeton nutans</i>       | 110 | <i>Sarothra gentianoides</i>   |
| 699 | <i>Potentilla reptans</i>       | 559 | <i>Sarracenia flava</i>        |
| 015 | <i>Prenanthes alba</i>          | 717 | <i>Sarracenia purpurea</i>     |
| 284 | <i>Prenanthes alba</i>          | 197 | <i>Satureja origanoides</i>    |
| 319 | <i>Prenanthes alba</i>          | 141 | <i>Satureja virginiana</i>     |
| 078 | <i>Prinos verticillatus</i>     | 107 | <i>Saururus cernuus</i>        |
| 000 | <i>Prunus virginiana</i>        | 525 | <i>Saxifraga nivalis</i>       |
| 627 | <i>Prunus virginiana</i>        | 304 | <i>Saxifraga pensylvanica</i>  |
| 682 | <i>Pteris atropurpurea</i>      | 407 | <i>Scandix cerefolium</i>      |



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|------------------------------|-----------------------------|
| 407 Scandix procumbens       | 135 Teucrium canadense      |
| 033 Schwalbea americana      | 443 Teucrium chamaepitys    |
| 585 Schoenus glomeratus      | 117 Teucrium virginicum     |
| 380 Scirpus capitatus        | 291 Thapsia trifoliata      |
| 570 Scirpus glomeratus       | 554 Tiarella cordifolia     |
| 457 Scirpus retrofractus     | 000 Tilia americana         |
| 456 Scirpus spadiceus        | 297 Tradescantia virginiana |
| 220 Scrophularia marilandica | 309 Tragopogon virginicum   |
| 000 Scrophularia nodosa      | 177 Trichostema dichotomum  |
| 261 Scutellaria hyssopifolia | 092 Trifolium biflorum      |
| 105 Scutellaria integrifolia | 289 Trifolium reflexum      |
| 280 Scutellaria lateriflora  | 390 Trifolium repens        |
| 249 Senecio aureus           | 000 Trillium sessile        |
| 286 Senecio aureus           | 626 Triosteum angustifolium |
| 015 Serratula glauca         | 524 Ulmus americana         |
| 175 Serratula glauca         | 000 Uniola paniculata       |
| 000 Serratula scariosa       | 508 Urtica cylindrica       |
| 651 Serratula scariosa       | 246 Urtica pumila           |
| 237 Serratula spicata        | 515 Utricularia gibba       |
| 014 Serratula squarrosa      | 517 Utricularia gibba       |
| 441 Sida abutilon            | 031 Utricularia subulata    |
| 131 Sida rhombifolia         | 258 Uvularia perfoliata     |
| 511 Sigesbeckia occidentalis | 537 Vaccinium frondosum     |
| 388 Silene antirrhina        | 042 Vaccinium stamineum     |
| 423 Silene virginica         | 043 Valeriana locusta       |
| 187 Silphium asteriscus      | var. radiata                |
| 610 Silphium helianthoides   | 299 Veratrum luteum         |
| 721 Sison canadense          | 448 Verbena nodiflora       |
| 528 Sisymbrium nasturtium-   | 000 Verbena spuria          |
| aquaticum                    | 431 Verbena urticifolia     |
| 018 Sisyrinchium bermudiana  | 163 Verbesina alba          |
| 279 Sium rigidius            | 166 Verbesina virginica     |
| 541 Smilax herbacea          | 161 Veronica anagallis-     |
| 082 Smilax lanceolata        | aquatica                    |
| 617 Smilax laurifolia        | 368 Veronica arvensis       |
| 082 Smilax pseudo-china      | 161 Veronica beccabunga     |
| 541 Smilax pseudo-china      | 226 Veronica marilandica    |
| 561 Smilax pseudo-china      | 367 Veronica serpyllifolia  |
| 630 Smilax pseudo-china      | 428 Veronica virginica      |
| 081 Smilax sarsaparilla      | 543 Viburnum acerifolium    |
| 464 Smyrnum aureum           | 064 Viburnum nudum          |
| 549 Smyrnum integrerrimum    | 047 Viburnum prunifolium    |
| 430 Solanum nigrum           | 793 Viola palmata           |
| var. vulgare                 | 254 Viola pedata            |
| 283 Solidago canadensis      | 470 Viola primulifolia      |
| 283 Solidago sempervirens    | 506 Vitex agnus-castus      |
| 733 Solidago sempervirens    | 696 Vitis vinifera          |
| 139 Sonchus canadensis       | 502 Xanthium strumarium     |
| 071 Sophora tinctoria        | 219 Xyris indica            |
| 434 Sparganium erectum       | 270 Yucca filamentosa       |
| 302 Spiraea aruncus          | 574 Zizania aquatica        |
| 421 Spiraea aruncus          |                             |
| 302 Spiraea opulifolia       |                             |
| 290 Spiraea trifoliata       |                             |
| 000 Staphylea trifolia       |                             |
| 573 Statice limonium         |                             |
| 621 Stipa avenacea           |                             |
| 171 Swertia difformis        |                             |
| 097 Tetragonotheca heli-     |                             |
| anthoides                    |                             |

**Species and Collection Numbers  
of Vascular Plants Gathered by  
John Clayton and Indirectly  
Reported in Linnaeus' First  
Edition of Species Plantarum**

- 000 Acer rubrum  
000 Agrimonia eupatoria

- |     |                                 |     |                                 |
|-----|---------------------------------|-----|---------------------------------|
| 000 | <i>Agrostis virginica</i>       | 000 | <i>Tilia americana</i>          |
| 000 | <i>Amaranthus lividus</i>       | 000 | <i>Trillium sessile</i>         |
| 000 | <i>Andromeda arborea</i>        | 000 | <i>Uniola paniculata</i>        |
| 000 | <i>Andromeda calyculata</i>     | 000 | <i>Verbena spuria</i>           |
| 000 | <i>Arethusa bulbosa</i>         | 001 | <i>Cynanchus suberosum</i>      |
| 000 | <i>Aristolochia serpentaria</i> | 003 | <i>Drosera rotundifolia</i>     |
| 000 | <i>Asclepias syriaca</i>        | 004 | <i>Galax aphylla</i>            |
| 000 | <i>Atriplex laciniata</i>       | 005 | <i>Lobelia cardinalis</i>       |
| 000 | <i>Betula lenta</i>             | 008 | <i>Osmunda virginiana</i>       |
| 000 | <i>Callicarpa americana</i>     | 009 | <i>Aster rigidus</i>            |
| 000 | <i>Carpinus ostrya</i>          | 009 | <i>Gerardia flava</i>           |
| 000 | <i>Celastrus scandens</i>       | 010 | <i>Chelone glabra</i>           |
| 000 | <i>Cercis canadensis</i>        | 010 | <i>Gentiana saponaria</i>       |
| 000 | <i>Chenopodium album</i>        | 011 | <i>Acrostichum areolatum</i>    |
| 000 | <i>Crataegus crus-galli</i>     | 011 | <i>Osmunda regalis</i>          |
| 000 | <i>Datura stramonium</i>        | 013 | <i>Cicuta maculata</i>          |
| 000 | <i>Dirca palustris</i>          | 013 | <i>Helianthus angustifolius</i> |
| 000 | <i>Eupatorium perfoliatum</i>   | 014 | <i>Acrostichum platyneuros</i>  |
| 000 | <i>Euphorbia ipecacuanhae</i>   | 014 | <i>Serratula squarrosa</i>      |
| 000 | <i>Fagus pumila</i>             | 015 | <i>Prenanthes alba</i>          |
| 000 | <i>Fraxinus americana</i>       | 015 | <i>Serratula glauca</i>         |
| 000 | <i>Gerardia purpurea</i>        | 016 | <i>Liriodendron tulipifera</i>  |
| 000 | <i>Gleditsia triacanthos</i>    | 017 | <i>Dracontium foetidum</i>      |
| 000 | <i>Ilex aquifolium</i>          | 018 | <i>Sisyrinchium bermudiana</i>  |
| 000 | <i>Juglans alba</i>             | 019 | <i>Leontodon dandelion</i>      |
| 000 | <i>Juglans nigra</i>            | 019 | <i>Salvia lyrata</i>            |
| 000 | <i>Laurus aestivalis</i>        | 020 | <i>Campanula perfoliata</i>     |
| 000 | <i>Laurus borbonia</i>          | 021 | <i>Kalmia angustifolia</i>      |
| 000 | <i>Lepidium virginicum</i>      | 022 | <i>Mediola virginiana</i>       |
| 000 | <i>Liquidambar styraciflua</i>  | 024 | <i>Magnolia virginiana</i>      |
| 000 | <i>Lonicera marilandica</i>     |     | var. <i>foetida</i>             |
| 000 | <i>Lupinus perennis</i>         | 027 | <i>Lycopodium alopecuroides</i> |
| 000 | <i>Lycopsis virginica</i>       | 028 | <i>Mitchella repens</i>         |
| 000 | <i>Myrica cerifera</i>          | 028 | <i>Sanicula marilandica</i>     |
| 000 | <i>Nyssa aquatica</i>           | 030 | <i>Andromeda mariana</i>        |
| 000 | <i>Oenothera biennis</i>        | 031 | <i>Utricularia subulata</i>     |
| 000 | <i>Ornithogalum hirsutum</i>    | 032 | <i>Azalea viscosa</i>           |
| 000 | <i>Osmunda claytoniana</i>      | 033 | <i>Schwalbea americana</i>      |
| 000 | <i>Oxalis violacea</i>          | 034 | <i>Magnolia virginiana</i>      |
| 000 | <i>Panax quinquefolius</i>      | 035 | <i>Convallaria racemosa</i>     |
| 000 | <i>Platanus occidentalis</i>    | 036 | <i>Oenothera fruticosa</i>      |
| 000 | <i>Polygala viridescens</i>     | 039 | <i>Chelone hirsuta</i>          |
| 000 | <i>Polygonum convolvulus</i>    | 040 | <i>Cypripedium calceolus</i>    |
| 000 | <i>Polygonum sagittatum</i>     | 042 | <i>Aralia nudicaulis</i>        |
| 000 | <i>Polygonum scandens</i>       | 042 | <i>Vaccinium stamineum</i>      |
| 000 | <i>Prunus virginiana</i>        | 043 | <i>Crataegus coccinea</i>       |
| 000 | <i>Pyrus coronaria</i>          | 043 | <i>Valeriana locusta</i>        |
| 000 | <i>Quercus alba</i>             |     | var. <i>radiata</i>             |
| 000 | <i>Quercus nigra</i>            | 044 | <i>Ornithogalum bivale</i>      |
| 000 | <i>Quercus phellos</i>          | 046 | <i>Chionanthus virginica</i>    |
| 000 | <i>Quercus prinus</i>           | 047 | <i>Viburnum prunifolium</i>     |
| 000 | <i>Quercus rubra</i>            | 049 | <i>Nyssa aquatica</i>           |
| 000 | <i>Rhus toxicodendron</i>       | 050 | <i>Robinia pseudoacacia</i>     |
| 000 | <i>Rumex britannica</i>         | 052 | <i>Azalea lutea</i>             |
| 000 | <i>Rumex verticillatus</i>      | 053 | <i>Orontium aquaticum</i>       |
| 000 | <i>Sanicula canadensis</i>      | 054 | <i>Laurus benzoin</i>           |
| 000 | <i>Sanicula europaea</i>        | 055 | <i>Crataegus tomentosa</i>      |
| 000 | <i>Scrophularia nodosa</i>      | 056 | <i>Arabis lyrata</i>            |
| 000 | <i>Serratula scariosa</i>       | 056 | <i>Laurus sassafras</i>         |
| 000 | <i>Staphylea trifolia</i>       | 058 | <i>Annona muricata</i>          |

060	<i>Houstonia caerulea</i>	130	<i>Mimulus ringens</i>
060	<i>Mespilus canadensis</i>	131	<i>Sida rhombifolia</i>
063	<i>Houstonia purpurea</i>	133	<i>Cacalia atriplicifolia</i>
064	<i>Viburnum nudum</i>	134	<i>Melothria pendula</i>
065	<i>Asclepias nivea</i>	135	<i>Hypericum setosum</i>
066	<i>Arum triphyllum</i>	135	<i>Teucrium canadense</i>
067	<i>Coix lacryma-jobi</i>	136	<i>Helianthus atrorubens</i>
069	<i>Ceanothus americanus</i>	137	<i>Ludwigia alternifolia</i>
070	<i>Andropogon divaricatum</i>	138	<i>Osteospermum uvedalia</i>
071	<i>Sophora tinctoria</i>	139	<i>Sonchus canadensis</i>
072	<i>Aster dumosus</i>	140	<i>Monarda punctata</i>
072	<i>Aster linifolius</i>	141	<i>Satureja virginiana</i>
073	<i>Andromeda paniculata</i>	142	<i>Buchnera americana</i>
074	<i>Aletris farinosa</i>	143	<i>Aster divaricatus</i>
075	<i>Euonymus americanus</i>	146	<i>Cassia ligustrina</i>
076	<i>Limodorum tuberosum</i>	147	<i>Eupatorium scandens</i>
077	<i>Arethusa ophioglossoides</i>	148	<i>Elephantopus tomentosus</i>
078	<i>Prinos verticillatus</i>	151	<i>Passiflora incarnata</i>
079	<i>Hydrangea arborescens</i>	152	<i>Euphorbia polygonifolia</i>
080	<i>Diospyros virginiana</i>	155	<i>Euphorbia corollata</i>
081	<i>Smilax sarsaparilla</i>	156	<i>Cassia chamaecrista</i>
082	<i>Smilax lanceolata</i>	157	<i>Polygala cruciata</i>
082	<i>Smilax pseudo-china</i>	158	<i>Penthorum sedoides</i>
083	<i>Asclepias decumbens</i>	159	<i>Baccharis foetida</i>
085	<i>Hedysarum repens</i>	161	<i>Veronica anagallis-</i> <i>aquatica</i>
085	<i>Ruellia strepens</i>	161	<i>Veronica beccabunga</i>
087	<i>Pontederia cordata</i>	162	<i>Eupatorium purpureum</i>
088	<i>Pyrola maculata</i>	163	<i>Verbesina alba</i>
092	<i>Trifolium biflorum</i>	164	<i>Gratiola dubia</i>
093	<i>Commelina communis</i>	165	<i>Erigeron camphoratum</i>
093	<i>Commelina erecta</i>	166	<i>Verbesina virginica</i>
094	<i>Dioscorea villosa</i>	168	<i>Hyssopus nepetoides</i>
097	<i>Tetragonotheca heli-</i> <i>anthoides</i>	171	<i>Swertia difformis</i>
098	<i>Ruellia strepens</i>	174	<i>Hedysarum frutescens</i>
099	<i>Cactus opuntia</i>	175	<i>Serratula glauca</i>
100	<i>Bignonia crucigera</i>	177	<i>Trichostema dichotomum</i>
102	<i>Cracca virginiana</i>	179	<i>Eupatorium coelestinum</i>
103	<i>Hedysarum violaceum</i>	182	<i>Glycine comosa</i>
105	<i>Scutellaria integrifolia</i>	183	<i>Polygonum virginianum</i>
106	<i>Cephalanthus occidentalis</i>	184	<i>Hedysarum paniculatum</i>
107	<i>Saururus cernuus</i>	185	<i>Lycopus virginicus</i>
109	<i>Helianthus giganteus</i>	187	<i>Ophiorrhiza mitreola</i>
110	<i>Sarothra gentianoides</i>	187	<i>Silphium asteriscus</i>
111	<i>Myosotis virginiana</i>	190	<i>Hedysarum viridiflorum</i>
112	<i>Clitoria virginiana</i>	191	<i>Medicago virginica</i>
113	<i>Glycine tomentosa</i>	192	<i>Gerardia pedicularia</i>
116	<i>Hedera quinquefolia</i>	193	<i>Carduus virginianus</i>
117	<i>Teucrium virginicum</i>	194	<i>Aster ericoides</i>
118	<i>Passiflora lutea</i>	195	<i>Helianthus laevis</i>
120	<i>Chironia dodecandra</i>	196	<i>Lobelia cliffortiana</i>
121	<i>Dolichos regularis</i>	197	<i>Satureja origanoides</i>
122	<i>Hibiscus moscheutos</i>	198	<i>Melissa nepeta</i>
123	<i>Cicuta maculata</i>	199	<i>Ageratum altissimum</i>
124	<i>Hedysarum nudiflorum</i>	199	<i>Geum virginianum</i>
125	<i>Angelica sylvestris</i>	200	<i>Oenothera mollissima</i>
126	<i>Crotalaria sagittalis</i>	201	<i>Acalypha virginica</i>
127	<i>Glycine apios</i>	201	<i>Lonicera symphoricarpos</i>
128	<i>Physalis viscosa</i>	202	<i>Helenium autumnale</i>
129	<i>Phryma leptostachya</i>	203	<i>Gnaphalium obtusifolium</i>



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|---------------------------------------|---------------------------------------|
| 206 <i>Cenchrus tribuloides</i>       | 279 <i>Sium rigidius</i>              |
| 208 <i>Bupththalmum helianthoides</i> | 280 <i>Scutellaria lateriflora</i>    |
| 209 <i>Hedysarum canescens</i>        | 281 <i>Lonicera symphoricarpos</i>    |
| 212 <i>Monarda clinopodia</i>         | 282 <i>Eryngium foetidum</i>          |
| 214 <i>Lythrum verticillatum</i>      | 283 <i>Solidago canadensis</i>        |
| 215 <i>Cicuta bulbifera</i>           | 283 <i>Solidago sempervirens</i>      |
| 215 <i>Cuscuta americana</i>          | 284 <i>Prenanthes alba</i>            |
| 216 <i>Asclepias verticillata</i>     | 286 <i>Obolaria virginica</i>         |
| 219 <i>Xyris indica</i>               | 286 <i>Senecio aureus</i>             |
| 220 <i>Scrophularia marilandica</i>   | 287 <i>Gnaphalium plantaginifolia</i> |
| 221 <i>Osteospermum uvedalia</i>      | 288 <i>Asarum canadense</i>           |
| 222 <i>Asclepias incarnata</i>        | 289 <i>Trifolium reflexum</i>         |
| 223 <i>Cynanchum suberosum</i>        | 290 <i>Spiraea trifoliata</i>         |
| 225 <i>Bignonia radicans</i>          | 291 <i>Thapsia trifoliata</i>         |
| 226 <i>Veronica marilandica</i>       | 292 <i>Salvia urticifolia</i>         |
| 227 <i>Rhexia virginica</i>           | 293 <i>Bartsia coccinea</i>           |
| 228 <i>Arum virginicum</i>            | 294 <i>Anemone thalictroides</i>      |
| 230 <i>Ascyrum hypericoides</i>       | 295 <i>Mespilus canadensis</i>        |
| 232 <i>Hypericum mutilum</i>          | 297 <i>Phlox glaberrima</i>           |
| 233 <i>Aralia spinosa</i>             | 297 <i>Tradescantia virginiana</i>    |
| 234 <i>Eriocaulon decangulare</i>     | 298 <i>Chrysogonum virginianum</i>    |
| 237 <i>Serratula spicata</i>          | 298 <i>Coreopsis auriculata</i>       |
| 238 <i>Rhus radicans</i>              | 299 <i>Veratrum luteum</i>            |
| 239 <i>Aster grandiflorus</i>         | 301 <i>Heuchera americana</i>         |
| 240 <i>Baccharis halimifolia</i>      | 302 <i>Spiraea aruncus</i>            |
| 242 <i>Bupththalmum frutescens</i>    | 302 <i>Spiraea opulifolia</i>         |
| 243 <i>Iva frutescens</i>             | 304 <i>Anchusa virginiana</i>         |
| 244 <i>Aster novae-angliae</i>        | 304 <i>Saxifraga pensylvanica</i>     |
| 245 <i>Cucubalus stellatus</i>        | 305 <i>Actaea racemosa</i>            |
| 245 <i>Monotropa uniflora</i>         | 307 <i>Geranium maculatum</i>         |
| 246 <i>Urtica pumila</i>              | 307 <i>Ligusticum scothieum</i>       |
| 247 <i>Sanguinaria canadensis</i>     | 308 <i>Coreopsis verticillata</i>     |
| 248 <i>Burmannia biflora</i>          | 309 <i>Tragopogon virginicum</i>      |
| 249 <i>Hydrophyllum virginianum</i>   | 310 <i>Origanum vulgare</i>           |
| 249 <i>Polemonium caeruleum</i>       | 311 <i>Ceanothus americanus</i>       |
| 249 <i>Senecio aureus</i>             | 313 <i>Galium bermudense</i>          |
| 250 <i>Epigaea repens</i>             | 314 <i>Samolus valerandii</i>         |
| 251 <i>Claytonia virginica</i>        | 316 <i>Queria canadensis</i>          |
| 253 <i>Iris verna</i>                 | 317 <i>Queria canadensis</i>          |
| 254 <i>Viola pedata</i>               | 319 <i>Prenanthes alba</i>            |
| 255 <i>Podophyllum peltatum</i>       | 320 <i>Adiantum pedatum</i>           |
| 256 <i>Amaryllis atamasca</i>         | 321 <i>Adiantum pedatum</i>           |
| 256 <i>Antirrhinum canadense</i>      | 322 <i>Polypodium lonchitis</i>       |
| 257 <i>Cynoglossum virginianum</i>    | 328 <i>Anemone hepatica</i>           |
| 258 <i>Uvularia perfoliata</i>        | 329 <i>Panax trifolius</i>            |
| 259 <i>Carex pseudocyperus</i>        | 331 <i>Lamium amplexicaule</i>        |
| 259 <i>Iris virginica</i>             | 332 <i>Juncus campestris</i>          |
| 260 <i>Orchis spectabilis</i>         | 333 <i>Oenothera fruticosa</i>        |
| 261 <i>Scutellaria hyssopifolia</i>   | 335 <i>Convallaria polygonatum</i>    |
| 263 <i>Asclepias rubra</i>            | 338 <i>Aquilegia canadensis</i>       |
| 263 <i>Parthenium integrifolium</i>   | 339 <i>Pulmonaria virginica</i>       |
| 267 <i>Dipsacus fullonum</i>          | 340 <i>Juncus bulbosus</i>            |
| 269 <i>Anthericum calyculatum</i>     | 341 <i>Equisetum arvense</i>          |
| 270 <i>Clematis vitalba</i>           | 342 <i>Cerastium semidecandrum</i>    |
| 270 <i>Yucca filamentosa</i>          | 343 <i>Plantago virginica</i>         |
| 271 <i>Betonica annua</i>             | 367 <i>Veronica serpyllifolia</i>     |
| 273 <i>Poa flava</i>                  | 368 <i>Veronica arvensis</i>          |
| 276 <i>Chelidonium glaucium</i>       | 372 <i>Geranium carolinianum</i>      |
| 277 <i>Diodia virginiana</i>          | 374 <i>Aphanes arvensis</i>           |
| 278 <i>Sagittaria sagittifolia</i>    | 376 <i>Hyoseris virginica</i>         |

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|-----|-------------------------------|-----|---------------------------------|
| 378 | <i>Callitriche palustris</i>  | 458 | <i>Panicum dichotomum</i>       |
| 379 | <i>Gratiola virginiana</i>    | 460 | <i>Andropogon virginicum</i>    |
| 380 | <i>Scirpus capitatus</i>      | 461 | <i>Eriophorum virginicum</i>    |
| 382 | <i>Polygonum aviculare</i>    | 462 | <i>Cardamine virginica</i>      |
| 383 | <i>Leontodon dandelion</i>    | 464 | <i>Smyrnium aureum</i>          |
| 384 | <i>Cupressus distichia</i>    | 467 | <i>Quercus alba</i>             |
| 385 | <i>Gnaphalium purpureum</i>   | 470 | <i>Viola primulifolia</i>       |
| 386 | <i>Hieracium venosum</i>      | 471 | <i>Platanus occidentalis</i>    |
| 387 | <i>Orobanche uniflora</i>     | 472 | <i>Arethusa bulbosa</i>         |
| 388 | <i>Silene antirrhina</i>      | 473 | <i>Ranunculus repens</i>        |
| 389 | <i>Renealmia usneoides</i>    | 474 | <i>Oxalis stricta</i>           |
| 390 | <i>Trifolium repens</i>       | 475 | <i>Arenaria rubra</i>           |
| 391 | <i>Aster vernus</i>           |     | var. <i>marina</i>              |
| 391 | <i>Salvia lyrata</i>          | 479 | <i>Rhus toxicodendron</i>       |
| 393 | <i>Juncus effusus</i>         | 480 | <i>Itea virginica</i>           |
| 394 | <i>Arabis lyrata</i>          | 485 | <i>Laurus indica</i>            |
| 399 | <i>Mollugo verticillata</i>   | 487 | <i>Liquidambar styraciflua</i>  |
| 400 | <i>Arabis canadensis</i>      | 488 | <i>Rhinanthus virginica</i>     |
| 404 | <i>Magnolia virginiana</i>    | 490 | <i>Rudbeckia hirta</i>          |
|     | var. <i>acuminata</i>         | 490 | <i>Rudbeckia purpurea</i>       |
| 407 | <i>Scandix cerefolium</i>     | 492 | <i>Rhus glabra</i>              |
| 407 | <i>Scandix procumbens</i>     | 494 | <i>Rumex acetosella</i>         |
| 408 | <i>Dianthera americana</i>    | 496 | <i>Pinus taeda</i>              |
| 410 | <i>Portulaca oleracea</i>     | 498 | <i>Agave virginica</i>          |
| 411 | <i>Clematis viorna</i>        | 500 | <i>Eryngium aquaticum</i>       |
| 412 | <i>Monarda ciliata</i>        | 502 | <i>Xanthium strumarium</i>      |
| 414 | <i>Polygala senega</i>        | 504 | <i>Convolvulus hederaceus</i>   |
| 417 | <i>Rudbeckia purpurea</i>     | 505 | <i>Lythrum lineare</i>          |
| 418 | <i>Lythrum petiolatum</i>     | 506 | <i>Vitex agnus-castus</i>       |
| 419 | <i>Lysimachia quadrifolia</i> | 507 | <i>Agrostis virginica</i>       |
| 421 | <i>Spiraea aruncus</i>        | 508 | <i>Urtica cylindrica</i>        |
| 422 | <i>Melanthium virginicum</i>  | 509 | <i>Cyperus odoratus</i>         |
| 423 | <i>Silene virginica</i>       | 510 | <i>Hedysarum hirtum</i>         |
| 424 | <i>Heuchera americana</i>     | 511 | <i>Sigesbeckia occidentalis</i> |
| 425 | <i>Menispermum virginicum</i> | 512 | <i>Ambrosia elatior</i>         |
| 428 | <i>Veronica virginica</i>     | 514 | <i>Melissa pulegioides</i>      |
| 429 | <i>Hydrocotyle umbellata</i>  | 515 | <i>Utricularia gibba</i>        |
| 430 | <i>Solanum nigrum</i>         | 516 | <i>Hedysarum marilandicum</i>   |
|     | var. <i>vulgare</i>           | 517 | <i>Utricularia gibba</i>        |
| 431 | <i>Verbena urticifolia</i>    | 520 | <i>Laurus aestivalis</i>        |
| 432 | <i>Salsola kali</i>           | 522 | <i>Caltha palustris</i>         |
| 433 | <i>Lysimachia punctata</i>    | 524 | <i>Ulmus americana</i>          |
| 434 | <i>Sparganium erectum</i>     | 525 | <i>Draba verna</i>              |
| 435 | <i>Antirrhinum elatine</i>    | 525 | <i>Saxifraga nivalis</i>        |
| 437 | <i>Nepeta virginica</i>       | 526 | <i>Crataegus viridis</i>        |
| 438 | <i>Apocynum cannabinum</i>    | 527 | <i>Salicornia virginica</i>     |
| 439 | <i>Eriocaulon decangulare</i> | 528 | <i>Sisymbrium nasturtium-</i>   |
| 440 | <i>Linum virginianum</i>      |     | aquaticum                       |
| 441 | <i>Sida abutilon</i>          | 529 | <i>Alsine media</i>             |
| 442 | <i>Amaranthus graecizans</i>  | 529 | <i>Anemone virginiana</i>       |
| 443 | <i>Teucrium chamaepitys</i>   | 530 | <i>Acer negundo</i>             |
| 444 | <i>Daucus carota</i>          | 531 | <i>Liquidambar styraciflua</i>  |
| 446 | <i>Elymus virginicus</i>      | 532 | <i>Populus heterophylla</i>     |
| 447 | <i>Hieracium gronovii</i>     | 537 | <i>Vaccinium frondosum</i>      |
| 448 | <i>Verbena nodiflora</i>      | 539 | <i>Rudbeckia laciniata</i>      |
| 449 | <i>Erigeron canadense</i>     | 541 | <i>Smilax herbacea</i>          |
| 454 | <i>Panicum capillare</i>      | 541 | <i>Smilax pseudo-china</i>      |
| 456 | <i>Scirpus spadiceus</i>      | 543 | <i>Viburnum acerifolium</i>     |
| 457 | <i>Panicum sanguinale</i>     | 544 | <i>Hamamelis virginiana</i>     |
| 457 | <i>Scirpus retrofractus</i>   | 545 | <i>Leontice thalictroides</i>   |

- 546 *Menispermum canadense*  
 547 *Pinus balsamea*  
 548 *Ferula canadensis*  
 549 *Smyrnum integerrimum*  
 552 *Hypericum canadense*  
 553 *Convolvulus spithameus*  
 554 *Tiarella cordifolia*  
 556 *Itea virginica*  
 556 *Polemonium dubium*  
 559 *Sarracenia flava*  
 560 *Orchis ciliaris*  
 561 *Smilax pseudo-china*  
 562 *Cyperus arundinacea*  
 563 *Polygala verticillata*  
 564 *Hedysarum virginicum*  
 565 *Astragalus canadensis*  
 567 *Hibiscus virginicus*  
 568 *Dolichos polystachyus*  
 569 *Amaranthus spinosus*  
 570 *Scirpus glomeratus*  
 571 *Atriplex halimus*  
 573 *Statice limonium*  
 574 *Zizania aquatica*  
 576 *Celosia paniculata*  
 577 *Dactylis cynosuroides*  
 578 *Panicum virgatum*  
 579 *Panicum glaucum*  
 580 *Juncus filiformis*  
 580 *Poa capillaris*  
 581 *Arundo phragmites*  
 581 *Poa capillaris*  
 582 *Briza eragrostis*  
 583 *Dactylis cynosuroides*  
 585 *Schoenus glomeratus*  
 586 *Epilobium hirsutum*  
 587 *Oldenlandia uniflora*  
 589 *Holcus laxus*  
 590 *Holcus striatus*  
 591 *Panicum italicum*  
 592 *Glycine bracteata*  
 594 *Gratiola dubia*  
 595 *Phalaris oryzoides*  
 599 *Acnida cannabina*  
 600 *Andropogon divaricatum*  
 601 *Andropogon alopecuroides*  
 602 *Andropogon hirtum*  
 603 *Eupatorium aromaticum*  
 604 *Orobanche virginiana*  
 605 *Gentiana villosa*  
 606 *Andropogon virginicum*  
 606 *Panicum virgatum*  
 607 *Aster concolor*  
 609 *Rudbeckia oppositifolia*  
 610 *Lechea minor*  
 610 *Silphium helianthoides*  
 614 *Hedysarum virginicum*  
 617 *Smilax laurifolia*  
 620 *Eupatorium trifoliatum*  
 621 *Andropogon nutans*  
 621 *Stipa avenacea*  
 624 *Celtis occidentalis*  
 625 *Fumaria cucullaria*  
 626 *Triosteum angustifolium*  
 627 *Prunus virginiana*  
 630 *Smilax pseudo-china*  
 632 *Diospyros virginiana*  
 634 *Rubus caesius*  
 635 *Arethusa divaricata*  
 639 *Orchis flava*  
 641 *Convolvulus panduratus*  
 646 *Elatine hydropiper*  
 647 *Lithospermum virginianum*  
 649 *Sagina virginica*  
 651 *Serratula squarrosa*  
 654 *Mentha spicata* var. *viridis*  
 655 *Elephantopus scaber*  
 657 *Equisetum hyemale*  
 657 *Rudbeckia triloba*  
 658 *Ophrys lilifolia*  
 660 *Saponaria officinalis*  
 664 *Potamogeton nutans*  
 665 *Convolvulus repens*  
 667 *Coreopsis angustifolia*  
 667 *Salicornia virginica*  
 668 *Orchis psycodes*  
 670 *Polygonum persicaria*  
 671 *Phytolacca americana*  
 672 *Polygonum persicaria*  
 673 *Hamamelis virginiana*  
 674 *Onoclea sensibilis*  
 679 *Populus nigra*  
 681 *Rhus vernix*  
 682 *Pteris atropurpurea*  
 684 *Myrica asplenifolia*  
 685 *Acrostichum polypodioides*  
 688 *Betula nigra*  
 691 *Erythronium dens-canis*  
 696 *Vitis vinifera*  
 699 *Potentilla reptans*  
 701 *Ranunculus abortivus*  
 703 *Rubus fruticosus*  
 704 *Asarum virginicum*  
 708 *Ophrys lilifolia*  
 710 *Ranunculus repens*  
 714 *Onoclea sensibilis*  
 717 *Sarracenia purpurea*  
 719 *Myrica asplenifolia*  
 721 *Sison canadense*  
 723 *Alisma subulata*  
 724 *Ambrosia trifida*  
 728 *Rhus copallinum*  
 732 *Bunias cakile*  
 733 *Solidago sempervirens*  
 741 *Oxalis longiflora*  
 745 *Arabis canadensis*  
 767 *Aster divaricatus*  
 768 *Polypremum procumbens*  
 774 *Ammannia ramosior*  
 793 *Viola palmata*  
 884 *Juniperus virginiana*



**Species of Vascular Plants  
from Temperate North America  
Attributed to Peter Kalm by  
Linnaeus in Species Plantarum  
or in the Linnaean Herbarium**

Acalypha virginica	Cephalanthus occidentalis
Acer negundo	Cercis canadense
Acer pensylvanicum	Chaerophyllum arborescens
Acer rubrum	Chelone glabra
Acer saccharinum	Chenopodium anthelminticum
Adiantum pedatum	Chenopodium virginicum
Agrostis virginica	Chironia angularis
Allium canadense	Chironia campanulata
Amaranthus retroflexus	Chrysocoma graminifolia
Andromeda mariana	Chrysosplenium oppositifolium
Andromeda paniculata	Cicuta bulbifera
Andromeda racemosa	Cicuta maculata
Andropogon nutans	Cinna arundinacea
Anemone quinquefolia	Cistus canadensis
Anemone thalictroides	Claytonia virginica
Anemone virginiana	Collinsonia canadensis
Angelica sylvestris	Convolvulus spithameus
Antirrhinum canadense	Conyza asteroides
Arabis canadensis	Cornus canadensis
Arabis lyrata	Cornus florida
Aralia spinosa	Cracca virginiana
Arenaria rubra var. marina	Crataegus coccinea
Arethusa bulbosa	Crataegus crus-galli
Arethusa ophioglossoides	Crataegus tomentosa
Aristolochia serpentaria	Crotalaria sagittalis
Asarum canadense	Cucubalus stellatus
Asclepias nivea	Cupressus thyoides
Asclepias tuberosa	Cuscuta americana
Asplenium rhizophyllum	Cynoglossum virginianum
Aster concolor	Cyperus strigosus
Aster cordifolius	Dalibarda repens
Aster laevis	Datisca hirta
Aster linariifolius	Dianthera americana
Aster novi-belgii	Diospyros virginiana
Aster puniceus	Dracocephalum virginianum
Aster undulatus	Dracontium foetidum
Astragalus canadensis	Elymus canadensis
Avena pensylvanica	Erigeron philadelphicus
Avena spicata	Eupatorium rotundifolium
Azalea lutea	Euphorbia corollata
Azalea viscosa	Euphorbia ipecacuanhae
Bartsia coccinea	Euphorbia polygonifolia
Briza eragrostis	Euphorbia portulacoides
Bromus ciliatus	Euonymus americanus
Bromus purgans	Fagus pumila
Cacalia atriplicifolia	Galium tinctorium
Carex folliculata	Galium trifidum
Carex squarrosa	Gentiana quinquefolia
Carpinus betulus	Gentiana saponaria
Cassia nictitans	Geranium carolinianum
Ceanothus americanus	Gerardia flava
Celastrus myrtifolius	Gerardia pedicularia
Celtis occidentalis	Gerardia purpurea
Cenchrus tribuloides	Gleditsia triacanthos
	Glycine apios
	Glycine bracteata
	Glycine comosa
	Gnaphalium margaritaceum
	Gnaphalium obtusifolium
	Gnaphalium plantaginifolium

Gnaphalium purpureum	Ophrys cernua
Gratiola virginiana	Ophrys lilifolia
Hamamelis virginiana	Orchis psycodes
Hedera quinquefolia	Origanum vulgare
Hedysarum hirtum	Ornithogalum hirsutum
Hedysarum violaceum	Orobanche virginiana
Helianthus decapetalus	Osmunda cinnamomea
Heuchera americana	Osmunda regalis
Hibiscus palustris	Osmunda virginiana
Hieracium gronovii	Oxalis stricta
Hieracium kalmii	Oxalis violacea
Hieracium paniculatum	Panax quinquefolius
Hippophae canadensis	Panicum clandestinum
Hordeum jubatum	Panicum crusgalli
Houstonia caerulea	Panicum dichotomum
Houstonia purpurea	Panicum dissectum
Hydrangea arborescens	Panicum filiforme
Hydrocotyle americana	Panicum latifolium
Hydrocotyle umbellata	Phlox maculata
Hyoseris virginica	Phlox subulata
Hypericum canadense	Pinus strobus
Hypericum kalmianum	Pinus taeda
Hypericum mutilum	Plantago virginica
Impatiens noti-tangere	Poa capillaris
Iris verna	Polygala incarnata
Juglans alba	Polygala lutea
Lactuca canadensis	Polygala sanguinea
Laurus sassafra	Polygala verticillata
Lilium canadense	Polygala viridescens
Limodorum tuberosum	Polygonum articulatum
Linum virginianum	Polygonum erectum
Liquidambar peregrina	Polygonum pensylvanicum
Liquidambar styraciflua	Polypodium marginale
Liriodendron tulipifera	Polypodium noveboracense
Lobelia cliffortiana	Polymnia canadensis
Lobelia kalmii	Pontederia cordata
Ludwigia alternifolia	Potentilla canadensis
Lupinus perennis	Prenanthes alba
Lycopodium alopecuroides	Prinos glaber
Lycopodium apodum	Prinos verticillatus
Lycopodium complanatum	Pteris atropurpurea
Lycopodium obscurum	Pulmonaria virginica
Lycopodium rupestre	Pyrola maculata
Magnolia virginiana	Pyrola umbellata
var. glauca	Quercus alba
Medeola virginica	Quercus nigra
Melanthium virginicum	Quercus phellos
Melissa pulegioides	Quercus prinus
Menispermum canadense	Quercus rubra
Mentha canadensis	Ranunculus abortivus
Mespilus arbutifolia	Rhexia virginica
Mespilus canadensis	Rhus glabra
Mitella diphylla	Rhus radicans
Mollugo verticillata	Rhus toxicodendron
Monotropa uniflora	Rhus vernix
Morus rubra	Ribes cynosbati
Nymphaea lotus	Rubus canadensis
Nymphaea lutea	Rubus hispidus
Nyssa aquatica	Rubus occidentalis
Oenothera fruticosa	Rumex persicarioides

*Salvia lyrata*  
*Sambucus canadensis*  
*Sanguinaria canadensis*  
*Sanguisorba canadensis*  
*Sarothra gentianoides*  
*Satureja origanoides*  
*Saxifraga nivalis*  
*Saxifraga pensylvanica*  
*Schoenus glomeratus*  
*Scirpus capitatus*  
*Scutellaria hyssopifolia*  
*Scutellaria integrifolia*  
*Senecio canadensis*  
*Serratula praealta*  
*Serratula spicata*  
*Silene nocturna*  
*Silene virginica*  
*Sison canadense*  
*Sisyrinchium bermudiana*  
*Smilax caduca*  
*Smilax pseudo-china*  
*Smilax rotundifolia*  
*Smilax tamnoides*  
*Smyrnium aureum*  
*Solidago canadensis*  
*Solidago flexicaulis*  
*Solidago lateriflora*  
*Sonchus canadensis*  
*Sophora tinctoria*  
*Spiraea opulifolia*  
*Spiraea tomentosa*  
*Spiraea trifoliata*  
*Swertia corniculata*  
*Thalictrum dioicum*  
*Thapsia trifoliata*  
*Thesium umbellatum*  
*Thuja occidentalis*  
*Trogopogon virginicum*  
*Trifolium arvense*  
*Trifolium biflorum*  
*Trillium cernuum*  
*Trillium erectum*  
*Ulmus americana*  
*Uniola spicata*  
*Urtica capitata*  
*Urtica cylindrica*  
*Urtica divaricata*  
*Urtica pumila*  
*Utricularia subulata*  
*Uvularia perfoliata*  
*Uvularia sessilifolia*  
*Vaccinium album*  
*Vaccinium corymbosum*  
*Vaccinium frondosum*  
*Vaccinium hispidulum*  
*Vaccinium ligustrinum*  
*Vaccinium mucronatum*  
*Vaccinium stamineum*  
*Veratrum luteum*  
*Viburnum acerifolium*

*Viburnum lentago*  
*Viburnum prunifolium*  
*Viola canadensis*  
*Viola lanceolata*  
*Viola pedata*  
*Viscum terrestre*  
*Vitis labrusca*  
*Vitis laciniosa*  
*Vitis vinifera*  
*Vitis vulpina*  
*Xyris indica*

**Selected Literature Cited by  
 Linnaeus in the First Edition  
 of Species Plantarum for Seem-  
 ingly Temperate North American  
 Vascular Plants**

**Bauhin**

*Acnida cannabina*  
*Adiantum pedatum*  
*Amaranthus lividus*  
*Cornus canadensis*  
*Diospyros virginiana*  
*Helianthus multiflorus*  
*Hibiscus palustris*  
*Laurus sassafras*  
*Othonna cineraria*  
*Rhus glabra*  
*Rudbeckia laciniata*  
*Sarracenia flava*  
*Sarracenia purpurea*  
*Smilax bona-nox*  
*Spiraea hypericifolia*  
*Tradescantia virginiana*  
*Trillium erectum*  
*Uvularia perfoliata*  
*Verbena nodiflora*  
*Vitis labrusca*

**Catesby**

*Acer rubrum*  
*Amaryllis atamasca*  
*Andromeda arborea*  
*Andromeda paniculata*  
*Annona glabra*  
*Annona triloba*  
*Arethusa divaricata*  
*Aristolochia serpentaria*  
*Azalea viscosa*  
*Bignonia caerulea*  
*Bignonia radicans*  
*Bignonia sempervirens*  
*Callicarpa americana*  
*Chionanthus virginica*  
*Cissampelos smilacina*  
*Clethra alnifolia*  
*Cornus florida*  
*Cupressus distichia*  
*Diospyros virginiana*



Dodecatheon meadia  
 Erythrina herbacea  
 Fagus pumila  
 Fraxinus americana  
 Gentiana saponaria  
 Gleditsia triacanthos  
 Hamamelis virginiana  
 Ilex cassine  
 Ipomoea carolina  
 Juglans alba  
 Juglans nigra  
 Kalmia angustifolia  
 Kalmia latifolia  
 Laurus borbonia  
 Laurus sassafra  
 Lilium canadense  
 Liriodendron tulipifera  
 Lonicera marilandica  
 Magnolia virginiana  
     var. acuminata  
 Magnolia virginiana  
     var. foetida  
 Magnolia virginiana  
     var. glauca  
 Magnolia virginiana  
     var. tripetala  
 Mitchella repens  
 Monotropa uniflora  
 Myrica cerifera  
 Nyssa aquatica  
 Panax quinquefolius  
 Philadelphus inodorus  
 Platanus occidentalis  
 Podophyllum peltatum  
 Populus balsamifera  
 Prunus virginiana  
 Quercus alba  
 Quercus nigra  
 Quercus phellos  
 Quercus prinus  
 Quercus rubra  
 Rhododendron maximum  
 Robinia pseudoacacia  
 Rudbeckia purpurea  
 Rumex sanguineus  
 Sarracenia flava  
 Sarracenia purpurea  
 Sloanea emarginata  
 Smilax laurifolia  
 Smilax tannoides  
 Stewartia malacodendron  
 Trillium cernuum  
 Trillium sessile  
 Uniola paniculata  
 Viscum purpureum  
 Viscum rubrum

#### Colden

Acer rubrum  
 Ambrosia elatior

Aralia racemosa  
 Azalea lutea  
 Azalea viscosa  
 Collinsonia canadensis  
 Cucubalus stellatus  
 Dracontium foetidum  
 Eupatorium perfoliatum  
 Eupatorium purpureum  
 Eupatorium scandens  
 Gaultheria procumbens  
 Hamamelis virginiana  
 Hieracium venosum  
 Holosteum succulentum  
 Kalmia angustifolia  
 Laurus sassafra  
 Leontice thalictroides  
 Mitella diphylla  
 Monarda didyma  
 Myrica asplenifolia  
 Pinus strobus  
 Pinus taeda  
 Polygonum sagittatum  
 Polygonum scandens  
 Pontederia cordata  
 Rhus glabra  
 Rumex britannica  
 Saxifraga pensylvanica  
 Staphylea trifolia  
 Trillium cernuum  
 Uvularia perfoliata  
 Uvularia sessilifolia  
 Veronica virginica

#### Cornuti

Actaea spicata var. alba  
 Adiantum pedatum  
 Ageratum altissimum  
 Angelica atropurpurea  
 Angelica lucida  
 Aquilegia canadensis  
 Aralia racemosa  
 Asarum canadense  
 Asclepias incarnata  
 Asclepias syriaca  
 Aster annuus  
 Bignonia radicans  
 Convallaria racemosa  
 Convallaria stellata  
 Eupatorium purpureum  
 Fumaria cucullaria  
 Fumaria sempervirens  
 Glycine apios  
 Hedera quinquefolia  
 Hedysarum canadense  
 Helenium autumnale  
 Hibiscus moscheutos  
 Monarda fistulosa  
 Polypodium bulbiferum  
 Rhus radicans  
 Rubus odoratus

Rudbeckia laciniata  
Sanguinaria canadensis  
Sanguisorba canadensis  
Solidago sempervirens  
Thalictrum cornutii  
Trillium erectum  
Uvularia perfoliata

### Dillenius

Actaea racemosa  
Asclepias amoenae  
Asclepias purpurascens  
Asclepias tuberosa  
Asclepias variagata  
Aster ericoides  
Aster grandiflorus  
Aster miser  
Astragalus canadensis  
Astragalus carolinianus  
Baccharis foetida  
Bidens nivea  
Bidens pilosa  
Canna glauca  
Carduus altissimus  
Clematis crispa  
Clematis viorna  
Clitoria virginiana  
Commelina communis  
Commelina erecta  
Convolvulus carolinus  
Coreopsis lanceolata  
Crotalaria perfoliata  
Erythrina herbacea  
Eupatorium coelestinum  
Eupatorium hyssopifolium  
Geranium carolinianum  
Glycine tomentosa  
Gnaphalium obtusifolium  
Gnaphalium purpureum  
Hedysarum marilandicum  
Hedysarum volubile  
Helianthus atrorubens  
Horminum virginicum  
Ipomoea lacunosa  
Ipomoea tannifolia  
Iris versicolor  
Lonicera symphoricarpos  
Lycopodium alopecuroides  
Lycopodium apodum  
Lycopodium carolinianum  
Lycopodium obscurum  
Magnolia virginiana  
var. glauca  
Malva caroliniana  
Mentha virginica  
Parthenium integrifolium  
Phaseolus helvulus  
Phlox glaberrima  
Polemonium rubrum  
Polygonum scandens

Ptelea trifoliata  
Rhus glabra  
Rhus radicans  
Ribes oxycanthoides  
Rosa carolina  
Rubus occidentalis  
Rudbeckia hirta  
Ruellia biflora  
Ruellia strepens  
Sanguinaria canadensis  
Saxifraga pensylvanica  
Serratula glauca  
Serratula praealta  
Serratula spicata  
Serratula squarrosa  
Silene antirrhina  
Silphium asteriscus  
Solanum carolinense  
Solanum virginianum  
Solidago altissima  
Solidago caesia  
Spermacoce tenuior  
Tetragonotheca helianthoides  
Trichostema brachiatum  
Triosteum perfoliatum

### Gronovius

Acer negundo  
Acer rubrum  
Acnida cannabina  
Acrostichum areolatum  
Acrostichum platyneuros  
Actaea racemosa  
Adiantum pedatum  
Agave virginica  
Ageratum altissimum  
Alettris farinosa  
Alisma subulata  
Amaranthus graecizans  
Amaranthus lividus  
Amaryllis atamasca  
Ambrosia elatior  
Ambrosia trifida  
Anchusa virginiana  
Andromeda arborea  
Andromeda mariana  
Andromeda paniculata  
Andropogon alopecuroides  
Andropogon divaricatus  
Andropogon virginicus  
Anemone thalictroides  
Anemone virginiana  
Antirrhinum canadense  
Apocynum cannabinum  
Aquilegia canadensis  
Arabis canadensis  
Arabis lyrata  
Aralia spinosa  
Arethusa bulbosa  
Arethusa divaricata

<i>Arethusa ophioglossoides</i>	<i>Coreopsis angustifolia</i>
<i>Aristolochia serpentaria</i>	<i>Coreopsis auriculata</i>
<i>Arum virginicum</i>	<i>Coreopsis verticillata</i>
<i>Asarum canadense</i>	<i>Cornus florida</i>
<i>Asarum virginicum</i>	<i>Cracca virginiana</i>
<i>Asclepias decumbens</i>	<i>Crataegus coccinea</i>
<i>Asclepias incarnata</i>	<i>Crataegus crus-galli</i>
<i>Asclepias rubra</i>	<i>Crataegus tomentosa</i>
<i>Asclepias syriaca</i>	<i>Crataegus viridis</i>
<i>Asclepias verticillata</i>	<i>Cucubalus stellatus</i>
<i>Ascyrum hypericoides</i>	<i>Cupressus distichia</i>
<i>Aster concolor</i>	<i>Cuscuta americana</i>
<i>Aster divaricatus</i>	<i>Cynoglossum virginianum</i>
<i>Aster dumosus</i>	<i>Cyperus arundinacea</i>
<i>Aster ericoides</i>	<i>Cyperus odoratus</i>
<i>Aster grandiflorus</i>	<i>Dianthera americana</i>
<i>Aster linifolius</i>	<i>Diodia virginiana</i>
<i>Aster novae-angliae</i>	<i>Dioscorea villosa</i>
<i>Aster rigidus</i>	<i>Diospyros virginiana</i>
<i>Aster vernus</i>	<i>Dirca palustris</i>
<i>Azalea lutea</i>	<i>Dolichos polystachyus</i>
<i>Azalea viscosa</i>	<i>Dolichos regularis</i>
<i>Baccharis foetida</i>	<i>Dracontium foetidum</i>
<i>Baccharis halimifolia</i>	<i>Elephantopus tomentosus</i>
<i>Bartsia coccinea</i>	<i>Elymus virginicus</i>
<i>Betula lenta</i>	<i>Epigaea repens</i>
<i>Betula nigra</i>	<i>Erigeron camphoratum</i>
<i>Bignonia radicans</i>	<i>Eriocaulon decangulare</i>
<i>Buchnera americana</i>	<i>Eriophorum virginicum</i>
<i>Bupthalmum helianthoides</i>	<i>Eryngium aquaticum</i>
<i>Burmanna biflora</i>	<i>Eupatorium aromaticum</i>
<i>Cacalia atriplicifolia</i>	<i>Eupatorium coelestinum</i>
<i>Callicarpa americana</i>	<i>Eupatorium perfoliatum</i>
<i>Campanula perfoliata</i>	<i>Eupatorium purpureum</i>
<i>Cardamine virginica</i>	<i>Eupatorium scandens</i>
<i>Carduus virginianus</i>	<i>Eupatorium trifoliatum</i>
<i>Cassia marilandica</i>	<i>Euphorbia corollata</i>
<i>Ceanothus americanus</i>	<i>Euphorbia ipecacuanhae</i>
<i>Celastrus scandens</i>	<i>Euphorbia polygonifolia</i>
<i>Celosia paniculata</i>	<i>Euonymus americanus</i>
<i>Celtis occidentalis</i>	<i>Fagus pumila</i>
<i>Cenchrus tribuloides</i>	<i>Ferula canadensis</i>
<i>Cephalanthus occidentalis</i>	<i>Fraxinus americana</i>
<i>Cercis canadensis</i>	<i>Fumaria cucullaria</i>
<i>Chelone glabra</i>	<i>Galaxaphylla</i>
<i>Chelone hirsuta</i>	<i>Galium bermudense</i>
<i>Chionanthus virginica</i>	<i>Gentiana saponaria</i>
<i>Chironia dodecandra</i>	<i>Gentiana villosa</i>
<i>Chrysogonum virginianum</i>	<i>Geranium carolinianum</i>
<i>Cicuta bulbifera</i>	<i>Gerardia flava</i>
<i>Cicuta maculata</i>	<i>Gerardia pedicularia</i>
<i>Claytonia virginica</i>	<i>Gerardia purpurea</i>
<i>Clematis viorna</i>	<i>Geum virginianum</i>
<i>Clitoria virginiana</i>	<i>Gleditsia triacanthos</i>
<i>Commelina communis</i>	<i>Glycine apios</i>
<i>Commelina erecta</i>	<i>Glycine bracteata</i>
<i>Convallaria racemosa</i>	<i>Glycine comosa</i>
<i>Convolvulus panduratus</i>	<i>Glycine tomentosa</i>
<i>Convolvulus repens</i>	<i>Gnaphalium obtusifolium</i>
<i>Convolvulus spithameus</i>	<i>Gnaphalium plantaginifolium</i>



<i>Gnaphalium purpureum</i>	<i>Lycopodium alopecuroides</i>
<i>Gratiola dubia</i>	<i>Lycopsis virginica</i>
<i>Gratiola virginiana</i>	<i>Lycopus virginicus</i>
<i>Hamamelis virginiana</i>	<i>Lysimachia quadrifolia</i>
<i>Hedera quinquefolia</i>	<i>Lythrum lineare</i>
<i>Hedysarum frutescens</i>	<i>Lythrum petiolatum</i>
<i>Hedysarum hirtum</i>	<i>Lythrum verticillatum</i>
<i>Hedysarum marilandicum</i>	<i>Magnolia virginiana</i>
<i>Hedysarum nudiflorum</i>	<i>Magnolia virginiana</i>
<i>Hedysarum paniculatum</i>	var. <i>acuminata</i>
<i>Hedysarum repens</i>	<i>Magnolia virginiana</i>
<i>Hedysarum violaceum</i>	var. <i>foetida</i>
<i>Hedysarum virginicum</i>	<i>Medeola virginiana</i>
<i>Hedysarum viridiflorum</i>	<i>Medicago virginica</i>
<i>Helenium autumnale</i>	<i>Melanthium virginicum</i>
<i>Helianthus angustifolius</i>	<i>Melissa pulegioides</i>
<i>Helianthus atrorubens</i>	<i>Menispermum canadense</i>
<i>Helianthus giganteus</i>	<i>Menispermum virginicum</i>
<i>Helianthus laevis</i>	<i>Mespilus canadensis</i>
<i>Heuchera americana</i>	<i>Mimulus ringens</i>
<i>Hibiscus moscheutos</i>	<i>Mitchella repens</i>
<i>Hibiscus virginicus</i>	<i>Monarda ciliata</i>
<i>Hieracium gronovii</i>	<i>Monarda clinopodia</i>
<i>Hieracium venosum</i>	<i>Monarda punctata</i>
<i>Holcus laxus</i>	<i>Monotropa uniflora</i>
<i>Holcus striatus</i>	<i>Myosotis virginiana</i>
<i>Houstonia caerulea</i>	<i>Myrica asplenifolia</i>
<i>Houstonia purpurea</i>	<i>Myrica cerifera</i>
<i>Hydrangea arborescens</i>	<i>Nepeta virginica</i>
<i>Hydrocotyle umbellata</i>	<i>Nyssa aquatica</i>
<i>Hydrophyllum virginianum</i>	<i>Obolaria virginica</i>
<i>Hyoseris virginica</i>	<i>Oenothera fruticosa</i>
<i>Hypericum mutilum</i>	<i>Oldenlandia uniflora</i>
<i>Hypericum setosum</i>	<i>Onoclea sensibilis</i>
<i>Hyssopus nepetoides</i>	<i>Ophiorrhiza mitreola</i>
<i>Iris verna</i>	<i>Orchis ciliaris</i>
<i>Iris virginica</i>	<i>Orchis flava</i>
<i>Itea virginica</i>	<i>Orchis psychodes</i>
<i>Juglans alba</i>	<i>Orchis spectabilis</i>
<i>Juglans nigra</i>	<i>Ornithogalum bivale</i>
<i>Juniperus virginiana</i>	<i>Ornithogalum hirsutum</i>
<i>Kalmia angustifolia</i>	<i>Orobanche uniflora</i>
<i>Kalmia latifolia</i>	<i>Orobanche virginiana</i>
<i>Laurus aestivalis</i>	<i>Orontium aquaticum</i>
<i>Laurus benzoin</i>	<i>Osmunda virginiana</i>
<i>Laurus borbonia</i>	<i>Osteospermum uvedalia</i>
<i>Laurus sassafras</i>	<i>Oxalis stricta</i>
<i>Lechea minor</i>	<i>Oxalis violacea</i>
<i>Leontice thalictroides</i>	<i>Panax quinquefolius</i>
<i>Leontodon dandelion</i>	<i>Panax trifolius</i>
<i>Limodorum tuberosum</i>	<i>Panicum dichotomum</i>
<i>Linum virginianum</i>	<i>Panicum virgatum</i>
<i>Liriodendron tulipifera</i>	<i>Parthenium integrifolium</i>
<i>Lithospermum virginianum</i>	<i>Penthorum sedoides</i>
<i>Lobelia cardinalis</i>	<i>Phalaris oryzoides</i>
<i>Lobelia cliffortiana</i>	<i>Phlox glaberrima</i>
<i>Lonicera marilandica</i>	<i>Phryma leptostachya</i>
<i>Lonicera symphoricarpos</i>	<i>Pinus balsamea</i>
<i>Ludwigia alternifolia</i>	<i>Pinus taeda</i>
<i>Lupinus perennis</i>	<i>Plantago virginica</i>

<i>Platanus occidentalis</i>	<i>Scutellaria hyssophifolia</i>
<i>Poa capillaris</i>	<i>Scutellaria integrifolia</i>
<i>Poa flava</i>	<i>Scutellaria lateriflora</i>
<i>Podophyllum peltatum</i>	<i>Senecio aureus</i>
<i>Polemonium dubium</i>	<i>Serratula glauca</i>
<i>Polygala cruciata</i>	<i>Serratula scariosa</i>
<i>Polygala senega</i>	<i>Serratula spicata</i>
<i>Polygala verticillata</i>	<i>Serratula squarrosa</i>
<i>Polygala viridescens</i>	<i>Sigesbeckia occidentalis</i>
<i>Polygonum sagittatum</i>	<i>Silene antirrhina</i>
<i>Polygonum scandens</i>	<i>Silene virginica</i>
<i>Polygonum virginianum</i>	<i>Silphium asteriscus</i>
<i>Populus heterophylla</i>	<i>Silphium helianthoides</i>
<i>Pontederia cordata</i>	<i>Sison canadense</i>
<i>Prenanthes alba</i>	<i>Sium rigidius</i>
<i>Prinos verticillatus</i>	<i>Smilax herbacea</i>
<i>Prunus virginiana</i>	<i>Smilax lanceolata</i>
<i>Pteris atropurpurea</i>	<i>Smilax laurifolia</i>
<i>Pulmonaria virginica</i>	<i>Smyrniun aureum</i>
<i>Pyrola maculata</i>	<i>Smyrniun integerrimum</i>
<i>Pyrus coronaria</i>	<i>Solidago canadensis</i>
<i>Quercus alba</i>	<i>Solidago sempervirens</i>
<i>Quercus nigra</i>	<i>Sonchus canadensis</i>
<i>Quercus phellos</i>	<i>Sophora tinctoria</i>
<i>Quercus prinus</i>	<i>Spiraea opulifolia</i>
<i>Quercus rubra</i>	<i>Spiraea trifoliata</i>
<i>Queria canadensis</i>	<i>Staphylea trifolia</i>
<i>Ranunculus abortivus</i>	<i>Stipa avenacea</i>
<i>Rhexia virginica</i>	<i>Swertia difformis</i>
<i>Rhinanthus virginica</i>	<i>Tetragonotheca helianthoides</i>
<i>Rhus copallinum</i>	<i>Teucrium canadense</i>
<i>Rhus glabra</i>	<i>Teucrium virginicum</i>
<i>Rhus radicans</i>	<i>Thapsia trifoliata</i>
<i>Rhus toxicodendron</i>	<i>Tilia americana</i>
<i>Robinia pseudoacacia</i>	<i>Tradescantia virginiana</i>
<i>Rudbeckia hirta</i>	<i>Trigopogon virginicum</i>
<i>Rudbeckia laciniata</i>	<i>Trichostema dichotomum</i>
<i>Rudbeckia oppositifolia</i>	<i>Trifolium biflorum</i>
<i>Rudbeckia purpurea</i>	<i>Trifolium reflexum</i>
<i>Rudbeckia triloba</i>	<i>Trillium sessile</i>
<i>Ruellia strepens</i>	<i>Triosteum angustifolium</i>
<i>Rumex britannica</i>	<i>Ulmus americana</i>
<i>Rumex verticillatus</i>	<i>Uniola paniculata</i>
<i>Salvia lyrata</i>	<i>Urtica pumila</i>
<i>Salvia urticifolia</i>	<i>Utricularia gibba</i>
<i>Sanguinaria canadensis</i>	<i>Utricularia subulata</i>
<i>Sanicula canadensis</i>	<i>Uvularia perfoliata</i>
<i>Sanicula marilandica</i>	<i>Vaccinium frondosum</i>
<i>Sarothra gentianoides</i>	<i>Vaccinium stamineum</i>
<i>Sarracenia flava</i>	<i>Valeriana locusta</i>
<i>Sarracenia purpurea</i>	var. <i>radiata</i>
<i>Satureja origanoides</i>	<i>Veratrum luteum</i>
<i>Satureja virginiana</i>	<i>Verbena nodiflora</i>
<i>Saururus cernuus</i>	<i>Verbena spuria</i>
<i>Saxifraga pensylvanica</i>	<i>Verbena urticifolia</i>
<i>Scandix procumbens</i>	<i>Verbesina virginica</i>
<i>Schwalbea americana</i>	<i>Veronica marilandica</i>
<i>Schoenus glomeratus</i>	<i>Veronica virginica</i>
<i>Scirpus capitus</i>	<i>Viburnum acerifolium</i>
<i>Scrophularia marilandica</i>	<i>Viburnum nudum</i>

Viburnum prunifolium  
 Viola palmata  
 Viola pedata  
 Yucca filamentosa

# **Hermann**

Acer rubrum  
 Ambrosia elatior  
 Anemone virginiana  
 Arum dracontium  
 Asclepias purpurascens  
 Asclepias tuberosa  
 Aster dumosus  
 Aster novae-angliae  
 Aster novi-belgii  
 Aster puniceus  
 Aster undulatus  
 Baccharis halimifolia  
 Bidens bipinnata  
 Campanula americana  
 Cynanchum hirtum  
 Eupatorium purpureum  
 Geum virginianum  
 Helianthus strumosus  
 Heuchera americana  
 Juglans nigra  
 Liriodendron tulipifera  
 Mespilus arbutifolia  
 Mitella diphylla  
 Napaea hermaphrodita  
 Ranunculus abortivus  
 Satureja virginiana  
 Senecio hieracifolius  
 Solidago flexicaulis  
 Solidago rigida  
 Solidago sempervirens  
 Staphylea trifolia  
 Verbena hastata

# **Linnaeus Hort. Cliff.**

Acer negundo  
 Ageratum altissimum  
 Amaranthus hypochondriacus  
 Amaryllis atamasca  
 Ambrosia trifida  
 Amorpha fruticosa  
 Andromeda paniculata  
 Angelica lucida  
 Apocynum androsaemifolium  
 Aralia racemosa  
 Aralia spinosa  
 Arethusa ophioglossoides  
 Aristolochia arborescens  
 Arum virginicum  
 Asclepias incarnata  
 Asclepias syriaca  
 Asclepias tuberosa  
 Ascyrum hypericoides  
 Aster annuus  
 Aster dumosus

Aster linifolius  
 Aster novae-angliae  
 Aster novi-belgii  
 Aster puniceus  
 Aster tradescantii  
 Aster undulatus  
 Azalea lutea  
 Baccharis halimifolia  
 Bartsia coccinea  
 Bidens pilosa  
 Bignonia capreolata  
 Bignonia radicans  
 Burmannia biflora  
 Cacalia porophyllum  
 Cactus pentagonus  
 Campanula perfoliata  
 Canna glauca  
 Cassia marilandica  
 Cassia nictitans  
 Ceanothus americanus  
 Cephalanthus occidentalis  
 Cercis canadensis  
 Chelone glabra  
 Chionanthus virginica  
 Chrysanthemum serotinum  
 Chrysogonum virginianum  
 Coix dactyloides  
 Collinsonia canadensis  
 Commelina communis  
 Commelina erecta  
 Convallaria racemosa  
 Coreopsis lanceolata  
 Cornus florida  
 Cracca virginiana  
 Crataegus coccinea  
 Crotalaria alba  
 Cupressus distichia  
 Cynanchum hirtum  
 Diodia virginiana  
 Diospyros virginiana  
 Dracocephalum virginianum  
 Erythrina herbacea  
 Eupatorium perfoliatum  
 Eupatorium purpureum  
 Eupatorium scandens  
 Euonymus americanus  
 Fumaria cucullaria  
 Fumaria sempervirens  
 Geum virginianum  
 Gleditsia triacanthos  
 Glycine apios  
 Glycine frutescens  
 Hedera quinquefolia  
 Hedysarum canadense  
 Hedysarum volubile  
 Helenium autumnale  
 Helianthus multiflorus  
 Helianthus strumosus  
 Heuchera americana  
 Hibiscus moscheutos



Houstonia caerulea  
 Hydrophyllum virginianum  
 Hyssopus nepetoides  
 Ilex cassine  
 Juglans nigra  
 Juniperus virginiana  
 Jussiaea erecta  
 Laurus benzoin  
 Laurus borbonia  
 Laurus sassafras  
 Liriodendron tulipifera  
 Lobelia cardinalis  
 Lobelia cliffortiana  
 Lobelia inflata  
 Lobelia siphilitica  
 Lonicera symphoricarpos  
 Ludwigia alternifolia  
 Lycopodium alopecuroides  
 Magnolia virginiana  
 Malva caroliniana  
 Menispermum canadense  
 Mespilus arbutifolia  
 Mitella diphylla  
 Monarda didyma  
 Monarda fistulosa  
 Monarda punctata  
 Myrica asplenifolia  
 Myrica cerifera  
 Napaea hermaphrodita  
 Nepeta virginica  
 Nyssa aquatica  
 Obolaria virginica  
 Onoclea sensibilis  
 Ophiorrhiza mitreola  
 Osteospermum uvedalia  
 Parthenium integrifolium  
 Phlox glaberrima  
 Platanus occidentalis  
 Podophyllum peltatum  
 Polygonum sagittatum  
 Polygonum virginianum  
 Populus balsamifera  
 Pontederia cordata  
 Prenanthes alba  
 Ptelea trifoliata  
 Quercus prinus  
 Quercus rubra  
 Rhus radicans  
 Robinia pseudoacacia  
 Rubus odoratus  
 Rudbeckia laciniata  
 Ruellia strepens  
 Rumex sanguineus  
 Sanguinaria canadensis  
 Sanguisorba canadensis  
 Sarracenia flava  
 Sarracenia purpurea  
 Satureja virginiana  
 Saururus cernuus  
 Senecio hieracifolius

Serratula squarrosa  
 Silphium asteriscus  
 Sison canadense  
 Smilax lanceolata  
 Smyrnium aureum  
 Solanum carolinense  
 Solanum diphyllum  
 Solanum tomentosum  
 Solidago canadensis  
 Solidago rigida  
 Spiraea hypericifolia  
 Spiraea opulifolia  
 Spiraea trifoliata  
 Staphylea trifolia  
 Tradescantia virginiana  
 Trichostema dichotomum  
 Uniola paniculata  
 Uvularia perfoliata  
 Verbena nodiflora  
 Verbena urticifolia  
 Veronica virginica

# Linnaeus Hort. Upsal.

Acer rubrum  
 Ageratum altissimum  
 Amaranthus hypocondriacus  
 Ambrosia elatior  
 Ambrosia trifida  
 Amorpha fruticosa  
 Angelica lucida  
 Aquilegia canadensis  
 Aralia racemosa  
 Asclepias syriaca  
 Aster annuus  
 Aster novi-belgii  
 Aster tradescantii  
 Bidens pilosa  
 Bignonia radicans  
 Bupththalmum helianthoides  
 Cacalia suaveolens  
 Campanula perfoliata  
 Cassia marilandica  
 Cassia nictitans  
 Ceanothus americanus  
 Cercis canadensis  
 Commelina communis  
 Commelina erecta  
 Coreopsis alternifolia  
 Coreopsis tripteris  
 Cornus florida  
 Crataegus coccinea  
 Cucubalus stellatus  
 Cupressus distichia  
 Erigeron camphoratum  
 Eupatorium altissimum  
 Eupatorium perfoliatum  
 Eupatorium scandens  
 Eupatorium sessilifolium  
 Euonymus americanus  
 Fumaria sempervirens

*Gleditsia triacanthos*  
*Glycine apios*  
*Helenium autumnale*  
*Helianthus multiflorus*  
*Hibiscus moscheutos*  
*Hyssopus nepetoides*  
*Juglans nigra*  
*Jussiaea erecta*  
*Liriodendron tulipifera*  
*Lobelia cardinalis*  
*Lobelia inflata*  
*Ludwigia alternifolia*  
*Malva caroliniana*  
*Menispermum canadense*  
*Monarda fistulosa*  
*Monarda punctata*  
*Myrica cerifera*  
*Osteospermum uvedalia*  
*Podophyllum peltatum*  
*Ribes oxycanthoides*  
*Robinia pseudoacacia*  
*Rubus odoratus*  
*Rudbeckia laciniata*  
*Rudbeckia triloba*  
*Ruellia strepens*  
*Rumex sanguineus*  
*Sanicula marilandica*  
*Saururus cernuus*  
*Scrophularia marilandica*  
*Senecio hieracifolius*  
*Solidago altissima*  
*Solidago canadensis*  
*Spiraea hypericifolia*  
*Spiraea trifoliata*  
*Tradescantia virginiana*  
*Verbena hastata*  
*Verbena spuria*  
*Verbena urticifolia*

#### Linnaeus Amoen. Acad.

*Bartsia coccinea*  
*Cornus canadensis*  
*Polgala cruciata*  
*Polygala lutea*  
*Polygala senega*  
*Polygala verticillata*  
*Polygala viridescens*  
*Rhododendron maximum*  
*Trillium erectum*  
*Uvularia perfoliata*  
*Viola canadensis*

#### Linnaeus Materia Medica

*Actaea racemosa*  
*Aristolochia serpentaria*  
*Ilex cassine*  
*Laurus benzoin*  
*Laurus sassafras*  
*Panax quinquefolius*  
*Polygala senega*

*Rhus copallinum*  
*Rhus vernix*  
*Rumex britannica*  
*Rumex sanguineus*

#### Linnaeus Nova Plantarum Genera

*Agave virginica*  
*Arethusa bulbosa*  
*Arethusa ophioglossoides*  
*Cracca virginiana*  
*Elymus canadensis*  
*Epigaea repens*  
*Gaultheria procumbens*  
*Gaura biennis*  
*Helonias bullata*  
*Holosteum succulentum*  
*Kalmia angustifolia*  
*Kalmia latifolia*  
*Lechea major*  
*Lechea minor*  
*Mitchella repens*  
*Mitella diphylla*  
*Napaea dioica*  
*Onoclea sensibilis*  
*Orontium aquaticum*  
*Phryma leptostachya*  
*Sarothra gentianoides*  
*Veratrum luteum*

#### Linnaeus Virid. Cliffort.

*Aralia racemosa*  
*Aralia spinosa*  
*Asclepias incarnata*  
*Asclepias syriaca*  
*Bignonia capreolata*  
*Commelina communis*  
*Commelina erecta*  
*Hyssopus nepetoides*  
*Monarda fistulosa*  
*Rudbeckia laciniata*  
*Solanum carolinense*  
*Solanum diphyllum*

#### Martyn

*Aster grandiflorus*  
*Buphthalmum helianthoides*  
*Cassia marilandica*  
*Coreopsis lanceolata*  
*Crotalaria alba*  
*Limodorum tuberosum*  
*Malva caroliniana*  
*Solidago altissima*

#### Mitchell

*Acnida cannabina*  
*Callicarpa americana*  
*Chelone penstemon*  
*Cracca virginiana*  
*Galax aphylla*  
*Hamamelis virginiana*

Hedera quinquefolia  
 Itea virginica  
 Mitchella repens  
 Onoclea sensibilis  
 Phryma leptostachya  
 Proserpinaca palustris  
 Stewartia malacodendron

# Morison

Acrostichum platyneuros  
 Actaea spicata var. alba  
 Adiantum pedatum  
 Ageratum altissimum  
 Alisma coridifolia  
 Amaryllis atamasca  
 Ambrosia artemisiifolia  
 Ambrosia elatior  
 Ambrosia trifida  
 Anchusa virginiana  
 Angelica lucida  
 Apocynum androsaemifolium  
 Apocynum cannabinum  
 Aquilegia canadensis  
 Aralia racemosa  
 Arethusa ophioglossoides  
 Aristolochia serpentaria  
 Asarum canadense  
 Asarum virginicum  
 Aster annuus  
 Aster cordifolius  
 Aster linifolius  
 Aster puniceus  
 Aster tradescantii  
 Aster undulatus  
 Baccharis halimifolia  
 Bartsia coccinea  
 Bidens bipinnata  
 Bidens frondosa  
 Bignonia radicans  
 Bupththalmum helianthoides  
 Cacalia atriplicifolia  
 Cacalia porophyllum  
 Campanula perfoliata  
 Carduus virginianus  
 Cenchrus tribuloides  
 Chrysanthemum serotinum  
 Cicuta maculata  
 Coix dactyloides  
 Convallaria racemosa  
 Convallaria stellata  
 Coreopsis alternifolia  
 Coreopsis auriculata  
 Coreopsis tripteris  
 Cynanchum hirtum  
 Cyperus arundinacea  
 Dracocephalum virginianum  
 Elymus canadensis  
 Eriophorum virginicum  
 Eupatorium altissimum  
 Eupatorium aromaticum

Eupatorium hyssopifolium  
 Eupatorium perfoliatum  
 Eupatorium purpureum  
 Eupatorium rotundifolium  
 Eupatorium sessilifolium  
 Fumaria sempervirens  
 Gentiana saponaria  
 Glycine apios  
 Gnaphalium obtusifolium  
 Gnaphalium purpureum  
 Hedysarum canadense  
 Helenium autumnale  
 Helianthus divaricatus  
 Helianthus giganteus  
 Helianthus strumosus  
 Helonias bullata  
 Hibiscus moscheutos  
 Houstonia caerulea  
 Hydrophyllum virginianum  
 Hyssopus nepetoides  
 Lilium canadense  
 Lithospermum virginianum  
 Lobelia cardinalis  
 Lobelia siphilitica  
 Lupinus perennis  
 Lycopodium alopecuroides  
 Monarda ciliata  
 Monotropa uniflora  
 Nepeta virginica  
 Obolaria virginica  
 Onoclea sensibilis  
 Orchis ciliaris  
 Orobancha virginiana  
 Osteospermum uvedalia  
 Oxalis stricta  
 Panicum latifolium  
 Plantago virginica  
 Poa capillaris  
 Polygonum virginianum  
 Polypodium bulbiferum  
 Polypodium virginianum  
 Pontederia cordata  
 Pulmonaria virginica  
 Rudbeckia hirta  
 Rudbeckia laciniata  
 Rudbeckia purpurea  
 Rudbeckia triloba  
 Salvia lyrata  
 Salvia urticifolia  
 Sanguisorba canadensis  
 Sarracenia flava  
 Sarracenia purpurea  
 Satureja origanoides  
 Satureja virginiana  
 Scandix procumbens  
 Scutellaria lateriflora  
 Senecio aureus  
 Serratula spicata  
 Serratula squarrosa  
 Silphium trifoliatum



Sison canadense  
 Sium rigidius  
 Smyrnum aureum  
 Solidago canadensis  
 Solidago sempervirens  
 Spiraea trifoliata  
 Staphylea trifoliata  
 Thalictrum cornutii  
 Tradescantia virginiana  
 Trillium erectum  
 Uvularia perfoliata  
 Verbena urticifolia  
 Yucca filamentosa

### Parkinson

Juglans alba  
 Platanus occidentalis  
 Thalictrum cornutii

### Petiver

Acrostichum areolatum  
 Asclepias verticillata  
 Baccharis halimifolia  
 Eriocaulon decangulare  
 Glycine comosa  
 Helianthus angustifolius  
 Lysimachia quadrifolia  
 Mitchella repens  
 Myrica asplenifolia  
 Ornithogalum hirsutum  
 Osmunda cinnamomea  
 Osmunda virginiana  
 Poa flava  
 Polypodium virginianum  
 Polypremum procumbens  
 Pontederia cordata  
 Pyrola maculata  
 Rudbeckia purpurea  
 Scutellaria hirsutifolia  
 Trifolium comosum

### Plukenet

Acer negundo  
 Acer rubrum  
 Acrostichum platyneuros  
 Actaea racemosa  
 Adiantum pedatum  
 Aletris farinosa  
 Amaryllis atamasca  
 Ambrosia artemisiifolia  
 Anchusa virginiana  
 Andromeda mariana  
 Andromeda paniculata  
 Anemone quinquefolia  
 Anemone thalictroides  
 Apocynum cannabinum  
 Arabis canadensis  
 Aralia spinosa  
 Arethusa bulbosa  
 Arethusa ophioglossoides

Aristolochia arborescens  
 Aristolochia serpentaria  
 Arum dracontium  
 Asarum virginicum  
 Asclepias variegata  
 Asclepias verticillata  
 Ascyrum crux-andreae  
 Ascyrum hypericoides  
 Ascyrum villosum  
 Aster divaricatus  
 Aster dumosus  
 Aster linariifolius  
 Aster mutabilis  
 Aster tenuifolius  
 Azalea lutea  
 Azalea viscosa  
 Baccharis halimifolia  
 Bartsia coccinea  
 Betula nigra  
 Bidens bipinnata  
 Bignonia sempervirens  
 Buphthalmum helianthoides  
 Cacalia atriplicifolia  
 Cacalia porophyllum  
 Callicarpa americana  
 Cardamine virginica  
 Cassia nictitans  
 Ceanothus americanus  
 Celastrus bullatus  
 Celosia paniculata  
 Cenchrus tribuloides  
 Cephalanthus occidentalis  
 Chaerophyllum arborescens  
 Chelone glabra  
 Chelone hirsuta  
 Chrysanthemum serotinum  
 Chrysogonum virginianum  
 Cicuta maculata  
 Claytonia virginica  
 Clethra alnifolia  
 Coix dactyloides  
 Convallaria racemosa  
 Conyza asteroides  
 Conyza bifrons  
     var. flosculosa  
 Conyza linifolia  
 Coreopsis alternifolia  
 Coreopsis auriculata  
 Coreopsis verticillata  
 Cornus florida  
 Cracca virginiana  
 Crataegus coccinea  
 Cupressus distichia  
 Cupressus thyoides  
 Cyperus arundinacea  
 Epigaea repens  
 Eriocaulon decangulare  
 Eriophorum virginicum  
 Eryngium aquaticum  
 Eupatorium aromaticum

<i>Eupatorium coelestinum</i>	<i>Orobanche uniflora</i>
<i>Eupatorium hyssopifolium</i>	<i>Osteospermum uvedalia</i>
<i>Eupatorium perfoliatum</i>	<i>Oxalis violacea</i>
<i>Eupatorium rotundifolium</i>	<i>Panax trifolius</i>
<i>Eupatorium scandens</i>	<i>Parthenium integrifolium</i>
<i>Euphorbia maculata</i>	<i>Phlox divaricata</i>
<i>Euonymus americanus</i>	<i>Phlox ovata</i>
<i>Fagus pumila</i>	<i>Phlox paniculata</i>
<i>Fumaria cucullaria</i>	<i>Phlox pilosa</i>
<i>Galium bermudense</i>	<i>Phlox setacea</i>
<i>Gaura biennis</i>	<i>Phlox subulata</i>
<i>Gerardia flava</i>	<i>Pinus balsamea</i>
<i>Gerardia pedicularia</i>	<i>Pinus strobus</i>
<i>Gerardia purpurea</i>	<i>Pinus taeda</i>
<i>Gleditsia triacanthos</i>	<i>Plantago virginica</i>
<i>Gnaphalium plantaginifolium</i>	<i>Polygala cruciata</i>
<i>Hamamelis virginiana</i>	<i>Polygala lutea</i>
<i>Hedysarum canescens</i>	<i>Polygala verticillata</i>
<i>Hedysarum paniculatum</i>	<i>Polygonum arifolium</i>
<i>Helianthus giganteus</i>	<i>Polygonum sagittatum</i>
<i>Helonias bullata</i>	<i>Polygonum scandens</i>
<i>Heuchera americana</i>	<i>Polypodium bulbiferum</i>
<i>Hibiscus virginicus</i>	<i>Pontederia cordata</i>
<i>Hieracium venosum</i>	<i>Prenanthes alba</i>
<i>Horminum virginicum</i>	<i>Prenanthes altissima</i>
<i>Houstonia caerulea</i>	<i>Prunus virginiana</i>
<i>Houstonia purpurea</i>	<i>Ptelea trifoliata</i>
<i>Hypericum setosum</i>	<i>Pulmonaria virginica</i>
<i>Hyssopus nepetoides</i>	<i>Pyrola maculata</i>
<i>Ilex cassine</i>	<i>Quercus prinus</i>
<i>Iris verna</i>	<i>Quercus rubra</i>
<i>Juglans alba</i>	<i>Rhexia mariana</i>
<i>Jussiaea erecta</i>	<i>Rhexia virginica</i>
<i>Kalmia angustifolia</i>	<i>Rhus copallinum</i>
<i>Kalmia latifolia</i>	<i>Rhus vernix</i>
<i>Laurus benzoin</i>	<i>Ribes oxycanthoides</i>
<i>Laurus indica</i>	<i>Robinia pseudoacacia</i>
<i>Laurus sassafras</i>	<i>Rudbeckia hirta</i>
<i>Liriodendron tulipifera</i>	<i>Rudbeckia purpurea</i>
<i>Ludwigia alternifolia</i>	<i>Rudbeckia triloba</i>
<i>Lysimachia quadrifolia</i>	<i>Sarothra gentianoides</i>
<i>Magnolia virginiana</i>	<i>Sarracenia flava</i>
var. <i>glauca</i>	<i>Sarracenia purpurea</i>
<i>Medeola virginiana</i>	<i>Satureja origanoides</i>
<i>Medicago virginica</i>	<i>Satureja virginiana</i>
<i>Menispermum canadense</i>	<i>Saururus cernuus</i>
<i>Mitchella repens</i>	<i>Saxifraga pensylvanica</i>
<i>Monarda ciliata</i>	<i>Schwalbea americana</i>
<i>Monarda punctata</i>	<i>Scirpus retrofractus</i>
<i>Monotropa uniflora</i>	<i>Scutellaria integrifolia</i>
<i>Morus rubra</i>	<i>Serratula glauca</i>
<i>Myosotis virginiana</i>	<i>Serratula praealta</i>
<i>Myrica asplenifolia</i>	<i>Serratula scariosa</i>
<i>Myrica cerifera</i>	<i>Serratula spicata</i>
<i>Nepeta virginica</i>	<i>Silphium helianthoides</i>
<i>Nyssa aquatica</i>	<i>Smilax bona-nox</i>
<i>Obolaria virginica</i>	<i>Smilax herbacea</i>
<i>Oldenlandia uniflora</i>	<i>Smilax lanceolata</i>
<i>Onoclea sensibilis</i>	<i>Smyrnum aureum</i>
<i>Ornithogalum hirsutum</i>	<i>Solanum diphyllum</i>

*Solanum verbascifolium*  
*Solanum virginianum*  
*Solidago flexicaulis*  
*Solidago latifolia*  
*Solidago sempervirens*  
*Spermocoe tenuior*  
*Spiraea hypericifolia*  
*Spiraea trifoliata*  
*Thesium umbellatum*  
*Tilia americana*  
*Trifolium reflexum*  
*Trillium sessile*  
*Triosteum angustifolium*  
*Uniola paniculata*  
*Urtica divaricata*  
*Vaccinium hispidulum*  
*Vaccinium stamineum*  
*Viburnum prunifolium*  
*Viola palmata*  
*Viola pedata*  
*Vitis arborea*  
*Vitis labrusca*  
*Vitis vulpina*  
*Yucca filamentosa*

#### Ray - Hist. Pl.

*Acrostichum platyneuros*  
*Adiantum pedatum*  
*Amaranthus hybridus*  
*Ambrosia artemisiifolia*  
*Ambrosia elatior*  
*Ambrosia trifida*  
*Aristolochia serpentaria*  
*Asclepias incarnata*  
*Ascyrum crux-andreae*  
*Ascyrum hypericoides*  
*Aster linariifolius*  
*Baccharis halimifolia*  
*Bartsia coccinea*  
*Betula nigra*  
*Bignonia capreolata*  
*Bignonia sempervirens*  
*Bupththalmum helianthoides*  
*Carduus virginianus*  
*Ceanothus americanus*  
*Celtis occidentalis*  
*Cenchrus tribuloides*  
*Cercis canadensis*  
*Chaerophyllum arborescens*  
*Chelone glabra*  
*Chrysanthemum serotinum*  
*Chrysogonum virginianum*  
*Cicuta bulbifera*  
*Coreopsis alternifolia*  
*Coreopsis auriculata*  
*Coreopsis tripteris*  
*Cucubalus stellatus*  
*Cyperus odoratus*  
*Dioscorea villosa*  
*Diospyros virginiana*

*Diospyros virginiana*  
*Dodecatheon meadia*  
*Elymus canadensis*  
*Eupatorium altissimum*  
*Eupatorium hyssopifolium*  
*Eupatorium perfoliatum*  
*Eupatorium purpureum*  
*Eupatorium sessilifolium*  
*Eupatorium trifoliatum*  
*Euphorbia polygonifolia*  
*Euonymus americanus*  
*Fumaria cucullaria*  
*Galium bermudense*  
*Gerardia pedicularia*  
*Hedysarum canescens*  
*Hedysarum marilandicum*  
*Helenium autumnale*  
*Houstonia caerulea*  
*Houstonia purpurea*  
*Juniperus virginiana*  
*Lactuca canadensis*  
*Lechea minor*  
*Lonicera marilandica*  
*Lycopodium alopecuroides*  
*Magnolia virginiana*  
     var. *glauca*  
*Magnolia virginiana*  
     var. *grisea*  
*Mimulus ringens*  
*Obolaria virginica*  
*Orchis ciliaris*  
*Orchis psychodes*  
*Orobanche virginiana*  
*Osmunda cinnamomea*  
*Phlox maculata*  
*Phlox pilosa*  
*Pinus balsamea*  
*Pinus taeda*  
*Plantago virginica*  
*Plantago incarnata*  
*Polygala lutea*  
*Polygala senega*  
*Polygala verticillata*  
*Polygonum virginianum*  
*Polypodium virginianum*  
*Quercus nigra*  
*Quercus phellos*  
*Quercus prinus*  
*Rhus toxicodendron*  
*Robinia pseudoacacia*  
*Rubus occidentalis*  
*Rudbeckia hirta*  
*Rudbeckia purpurea*  
*Sanguinaria canadensis*  
*Sanicula marilandica*  
*Scrophularia marilandica*  
*Scutellaria integrifolia*  
*Senecio aureus*  
*Silphium trifoliatum*  
*Smilax herbacea*



Smilax lanceolata  
 Smyrniun aureum  
 Solidago caesia  
 Spiraea trifoliata  
 Trichostema dichotomum  
 Vaccinium hispidulum  
 Valeriana locusta  
     var. radiata  
 Vitis vulpina

**Ray - Banister, 1688**

Chelone hirsuta  
 Clematis viorna  
 Gerardia flava  
 Gerardia purpurea  
 Hieracium venosum  
 Napaea dioica  
 Serratula scariosa  
 Serratula spicata

**Ray - Petiver Hort. Sicc.**

Asclepias decumbens  
 Chionanthus virginica  
 Clematis viorna  
 Clitoria mariana  
 Polygala lutea  
 Trichostema dichotomum  
 Trifolium biflorum  
 Viola pedata

**Royen**

Acer negundo  
 Adiantum pedatum  
 Amaryllis atamasca  
 Ambrosia trifida  
 Amorpha fruticosa  
 Andropogon virginicum  
 Anemone virginiana  
 Angelica atropurpurea  
 Angelica lucida  
 Apocynum androsaemifolium  
 Aralia racemosa  
 Aralia spinosa  
 Arum dracontium  
 Asclepias incarnata  
 Asclepias syriaca  
 Asclepias tuberosa  
 Aster annuus  
 Aster cordifolius  
 Aster dumosus  
 Aster ericoides  
 Aster grandiflorus  
 Aster linifolius  
 Aster novae-angliae  
 Aster puniceus  
 Aster tradescantii  
 Aster undulatus  
 Astragalus carolinianus  
 Baccharis halimifolia  
 Bidens nivea

Bignonia capreolata  
 Bignonia sempervirens  
 Cactus pentagonus  
 Campanula americana  
 Campanula perfoliata  
 Cassia marilandica  
 Ceanothus americanus  
 Cephalanthus occidentalis  
 Cercis canadensis  
 Chionanthus virginica  
 Chrysanthemum serotinum  
 Coix dactyloides  
 Commelina communis  
 Commelina erecta  
 Convallaria racemosa  
 Coreopsis alternifolia  
 Coreopsis lanceolata  
 Coreopsis tripteris  
 Cornus florida  
 Crataegus coccinea  
 Crotalaria alba  
 Cupressus distichia  
 Cynanchum hirtum  
 Cyperus odoratus  
 Diospyros virginiana  
 Dracocephalum virginianum  
 Erythrina herbacea  
 Eupatorium perfoliatum  
 Eupatorium purpureum  
 Eupatorium scandens  
 Fagus pumila  
 Fraxinus americana  
 Fumaria cucullaria  
 Fumaria sempervirens  
 Geranium carolinianum  
 Glycine apios  
 Glycine frutescens  
 Gnaphalium purpureum  
 Gomphrena interrupta  
 Hedera quinquefolia  
 Hedysarum canadense  
 Hedysarum canescens  
 Hedysarum volubile  
 Helenium autumnale  
 Helianthus multiflorus  
 Helianthus strumosus  
 Heuchera americana  
 Hibiscus moscheutos  
 Hydrophyllum virginianum  
 Hyssopus nepetoides  
 Ilex cassine  
 Juglans nigra  
 Juniperus virginiana  
 Laurus benoin  
 Laurus borbonia  
 Laurus sassafras  
 Limodorum tuberosum  
 Liriodendron tulipifera  
 Lobelia cardinalis  
 Lobelia inflata

*Lobelia siphilitica*  
*Lonicera symphoricarpos*  
*Ludwigia alternifolia*  
*Lupinus perennis*  
*Magnolia virginica*  
*Mespilus arbutifolia*  
*Mitella diphylla*  
*Monarda fistulosa*  
*Monarda punctata*  
*Myrica cerifera*  
*Napaea hermaphrodita*  
*Orchis ciliaris*  
*Ornithogalum hirsutum*  
*Osteosperma uvedalia*  
*Phaseolus helvulus*  
*Phlox glaberrima*  
*Phryma leptostachya*  
*Platanus occidentalis*  
*Podophyllum peltatum*  
*Polygonum sagittatum*  
*Polygonum virginianum*  
*Polypodium bulbiferum*  
*Pontederia cordata*  
*Populus balsamifera*  
*Prunus virginiana*  
*Quercus prinus*  
*Quercus rubra*  
*Ranunculus abortivus*  
*Rhus copallinum*  
*Rhus radicans*  
*Rhus vernix*  
*Robinia pseudoacacia*  
*Rubus odoratus*  
*Rudbeckia laciniata*  
*Ruellia strepens*  
*Rumex sanguineus*  
*Sanguisorba canadensis*  
*Satureja virginiana*  
*Saururus cernuus*  
*Scutellaria lateriflora*  
*Senecio hieracifolius*  
*Serratula squarrosa*  
*Silene antirrhina*  
*Silphium asteriscus*  
*Silphium trifoliatum*  
*Sison canadense*  
*Smyrnum aureum*  
*Solanum carolinense*  
*Solanum diphyllum*  
*Solanum tomentosum*  
*Solanum virginianum*  
*Solidago canadensis*  
*Solidago flexicaulis*  
*Solidago rigida*  
*Sonchus floridanus*  
*Spermacoce tenuior*  
*Spiraea hypericifolia*  
*Spiraea opulifolia*  
*Spiraea trifoliata*  
*Staphylea trifoliata*

*Thalictrum cornutii*  
*Tradescantia virginiana*  
*Trichostema dichotomum*  
*Trifolium comosum*  
*Uniola paniculata*  
*Uvularia perfoliata*  
*Verbena hastata*  
*Verbena nodiflora*  
*Verbena urticifolia*  
*Veronica virginica*

#### Tournefort

*Amaranthus hypocondriacus*  
*Aster novae-angliae*  
*Astragalus canadensis*  
*Bidens frondosa*  
*Chelone glabra*  
*Circaea lutetiana*  
     var. *canadensis*  
*Lactuca canadensis*  
*Lilium canadense*  
*Lobelia kalmii*  
*Menispermum canadense*  
*Mentzelia aspera*  
*Oenothera fruticosa*  
*Oxalis stricta*  
*Polygonum scandens*  
*Rhus toxicodendron*  
*Teucrium canadense*

#### Vaillant

*Alsima cordifolia*  
*Bidens nivea*  
*Coreopsis verticillata*  
*Panax quinquefolius*  
*Panax trifolius*  
*Prenanthes alba*  
*Sanicula canadensis*  
*Sonchus floridanus*  
*Viburnum prunifolium*

#### Synonymies for Some of the Vascular Plants Reported for Temperate North America in Linnaeus' First Edition of Species Plantarum

*Acrostichum areolatum* =  
     *Woodwardia areolata*  
*Acrostichum platyneuros* =  
     *Asplenium platyneuron*  
*Acrostichum polypodioides* =  
     *Polypodium polypodioides*  
*Actaea racemosa* =  
     *Cimicifuga racemosa*  
*Actaea spicata* var. *alba* =  
     *Actaea pachypoda*  
*Agrostis virginica* =  
     *Sporobolus virginicus*  
*Alisma cordifolia* =  
     *Echinodorus cordifolius*

- Alisma subulata* =  
*Sagittaria subulata*  
*Alsine media* =  
*Stellaria media*  
*Amaryllis atamasca* =  
*Zephyranthes atamasca*  
*Ambrosia elatior* =  
*Ambrosia artemisiifolia*  
var. *elatior*  
*Ammannia ramosior* =  
*Rotala ramosior*  
*Andromeda arborea* =  
*Oxydendrum arboreum*  
*Andromeda calyculata* =  
*Chamaedaphne calyculata*  
*Andromeda mariana* =  
*Lyonia mariana*  
*Andromeda paniculata* =  
*Leucothoe racemosa*  
*Andromeda racemosa* =  
*Leucothoe racemosa*  
*Andropogon alopecuroides* =  
*Erianthus alopecuroides*  
*Andropogon divaricatum* =  
*Erianthus alopecuroides*  
*Andropogon hirtum* =  
*Hyparrhenia hirta*  
*Andropogon nutans* =  
*Sorghastrum nutans*  
*Anemone hepatica* =  
*Hepatica nobilis*  
*Anemone thalictroides* =  
*Anemonella thalictroides*  
*Annona triloba* =  
*Asimina triloba*  
*Antirrhinum canadense* =  
*Linaria canadensis*  
*Antirrhinum elatine* =  
*Kickxia elatine*  
*Aphanes arvensis* =  
*Alchemilla arvensis*  
*Arbutus uva-ursi* =  
*Arctostaphylos uva-ursi*  
*Arenaria rubra* var. *marina*  
= *Spergularia marina*  
*Arethusa divaricata* =  
*Cleistes divaricata*  
*Arethusa ophioglossoides* =  
*Pogonia ophioglossoides*  
*Arenica maritima* =  
*Senecio pseudoarnica*  
*Arum dracontium* =  
*Arisaema dracontium*  
*Arum triphyllum* =  
*Arisaema triphyllum*  
*Arum virginicum* =  
*Peltandra virginica*  
*Arundo phragmites* =  
*Phragmites australis*  
*Asclepias amoena* =  
*Asclepias purpurascens*  
*Asclepias decumbens* =  
*Asclepias tuberosa*  
*Ascyrum crux-andreae* =  
*Hypericum crux-andreae*  
*Ascyrum hypericoides* =  
*Hypericum hypericoides*  
*Ascyrum villosum* =  
*Hypericum setosum*  
*Aster annuus* =  
*Erigeron annuus*  
*Aster vernus* =  
*Erigeron vernus*  
*Avena pensylvanica* =  
*Trisetum pensylvanicum*  
*Avena spicata* =  
*Trisetum spicatum*  
*Azalea lutea* =  
*Rhododendron nudiflorum*  
*Azalea viscosa* =  
*Rhododendron viscosum*  
*Baccharis foetida* =  
*Pluchea foetida*  
*Bartsia coccinea* =  
*Castilleja coccinea*  
*Betonica annua* =  
*Stachys annua*  
*Bidens nivea* =  
*Melanthera nivea*  
*Bignonia catalpa* =  
*Catalpa bignonioides*  
*Bignonia crucigera* =  
*Bignonia capreolata*  
*Bignonia radicans* =  
*Campsis radicans*  
*Bignonia sempervirens* =  
*Gelsemium sempervirens*  
*Briza eragrostis* =  
*Eragrostis cilianensis*  
*Bunias cakile* =  
*Cakile maritima*  
*Bupthalmum frutescens* =  
*Borrichia frutescens*  
*Bupthalmum helianthoides* =  
*Kallias helianthoides*  
*Cacalia atriplicifolia* =  
*Arnoglossum atriplicifolium*  
*Cacalia porophyllum* =  
*Porophyllum ruderales*  
*Cacalia suaveolens* =  
*Hasteola suaveolens*  
*Cactus opuntia* =  
*Opuntia vulgaris*  
*Cactus pentagonus* =  
*Cereus pentagonus*  
*Campanula perfoliata* =  
*Triodanis perfoliata*  
*Cardamine virginica* =  
*Sibara virginica*



<i>Carduus altissimus</i> =	<i>Cracca virginiana</i> =
<i>Cirsium altissimum</i>	<i>Tephrosia virginiana</i>
<i>Carduus virginianus</i> =	<i>Crotalaria alba</i> =
<i>Cirsium virginianum</i>	<i>Baptisia alba</i>
<i>Carpinus ostrya</i> =	<i>Crotalaria perfoliata</i> =
<i>Ostrya virginiana</i>	<i>Baptisia perfoliata</i>
<i>Celastrus bullatus</i> =	<i>Cucubalus stellatus</i> =
<i>Celastrus scandens</i>	<i>Silene stellata</i>
<i>Celosia paniculata</i> =	<i>Cupressus distichia</i> =
<i>Iresine paniculata</i>	<i>Taxodium distichium</i>
<i>Chaerophyllum arborescens</i> =	<i>Cupressus thysoides</i> =
<i>Aralia spinosa</i>	<i>Chamaecyparis thuyoides</i>
<i>Chelidonium glaucium</i> =	<i>Cynanchum suberosum</i> =
<i>Glaucium flavum</i>	<i>Matelea suberosa</i>
<i>Chelone hirsuta</i> =	<i>Cynosurus aegyptius</i> =
<i>Penstemon hirsutus</i>	<i>Dactyloctenium aegyptium</i>
<i>Chelone penstemon</i> =	<i>Cyperus arundinacea</i>
<i>Penstemon laevigatus</i>	<i>Dulichium arundinaceum</i>
<i>Chenopodium anthelminticum</i> =	<i>Dactylis cynosuroides</i> =
<i>Chenopodium ambrosioides</i>	<i>Spartina cynosuroides</i>
<i>Chironia angularis</i> =	<i>Datisca hirta</i> =
<i>Sabatia angularis</i>	<i>Rhus hirta</i>
<i>Chironia campanulata</i> =	<i>Dianthera americana</i> =
<i>Sabatia campanulata</i>	<i>Justicia americana</i>
<i>Chironia dodecandra</i> =	<i>Dolichos polystachyus</i> =
<i>Sabatia dodecandra</i>	<i>Phaseolus polystachyus</i>
<i>Chrysocoma graminifolia</i> =	<i>Dolichos regularis</i> =
<i>Euthamia graminifolia</i>	<i>Galactia regularis</i>
<i>Cissampelos smilacina</i> =	<i>Dracocephalum virginianum</i> =
<i>Menispermum canadense</i>	<i>Physostegia virginiana</i>
<i>Cistus canadensis</i> =	<i>Dracontium foetidum</i> =
<i>Helianthemum canadense</i>	<i>Symplocarpus foetidus</i>
<i>Clinopodium incanum</i> =	<i>Elymus hystrix</i> =
<i>Pycnanthemum incanum</i>	<i>Hystrix patula</i>
<i>Clitoria virginiana</i> =	<i>Erigeron camphoratus</i> =
<i>Centrosema virginiana</i>	<i>Pluchea camphorata</i>
<i>Coix dactyloides</i> =	<i>Erigeron canadense</i> =
<i>Tripsacum dactyloides</i>	<i>Conyza canadensis</i>
<i>Convallaria polygonatum</i> =	<i>Eupatorium altissimum</i> =
<i>Polygonatum officinale</i>	<i>Ageratina altissima</i>
<i>Convallaria racemosa</i> =	<i>Eupatorium aromaticum</i> =
<i>Smilacina racemosa</i>	<i>Ageratina aromatica</i>
<i>Convallaria stellata</i> =	<i>Eupatorium coelestinum</i> =
<i>Smilacina stellata</i>	<i>Conoclinium coelestinum</i>
<i>Convolvulus carolinus</i> =	<i>Eupatorium scandens</i> =
<i>Ipomoea trichocarpa</i>	<i>Mikania scandens</i>
<i>Convolvulus panduratus</i> =	<i>Eupatorium trifoliatum</i> =
<i>Ipomoea pandurata</i>	<i>Eupatorium purpureum</i>
<i>Convolvulus repens</i> =	<i>Euphorbia portulacoides</i> =
<i>Calystegia sepium</i>	<i>Euphorbia ipecacuanhae</i>
<i>Convolvulus spithameus</i> =	<i>Fagus pumila</i> =
<i>Calystegia spithamea</i>	<i>Castanea pumila</i>
<i>Conyza asteroides</i> =	<i>Ferula canadensis</i> =
<i>Sericocarpus asteroides</i>	<i>Ligusticum canadense</i>
<i>Conyza linifolia</i> =	<i>Fumaria cucullaria</i> =
<i>Sericocarpus linifolius</i>	<i>Dicentra cucullaria</i>
<i>Coreopsis alternifolia</i> =	<i>Fumaria sempervirens</i> =
<i>Verbesina alternifolia</i>	<i>Corydalis sempervirens</i>
<i>Coreopsis angustifolia</i> =	<i>Gentiana quinquefolia</i> =
<i>Helianthus angustifolia</i>	<i>Gentianeella quinquefolia</i>

- Gerardia flava* =  
     *Aureolaria flava*  
*Gerardia pedicularia* =  
     *Aureolaria pedicularia*  
*Gerardia purpurea* =  
     *Agalinis purpurea*  
*Glycine apios* =  
     *Apios americana*  
*Glycine bracteata* =  
     *Amphicarpa bracteata*  
*Glycine comosa* =  
     *Amphicarpa bracteata*  
*Glycine frutescens* =  
     *Wisteria frutescens*  
*Glycine tomentosa* =  
     *Rhynchosia tomentosa*  
*Gnaphalium margaritaceum* =  
     *Anaphalis margaritacea*  
*Gnaphalium plantaginifolium* =  
     *Antennaria plantaginifolia*  
*Gnaphalium purpureum* =  
     *Gamochaeta purpurea*  
*Gomphrena interrupta* =  
     *Froelichia interrupta*  
*Gratiola dubia* =  
     *Lindernia dubia*  
*Guilandina dioica* =  
     *Gymnocladus dioica*  
*Hedera quinquefolia* =  
     *Parthenocissus quinquefolia*  
*Hedysarum canadense* =  
     *Desmodium canadense*  
*Hedysarum canescens* =  
     *Desmodium canescens*  
*Hedysarum frutescens* =  
     *Lespedeza violacea*  
*Hedysarum hirtum* =  
     *Lespedeza hirta*  
*Hedysarum marilandicum* =  
     *Desmodium marilandicum*  
*Hedysarum nudiflorum* =  
     *Desmodium nudiflorum*  
*Hedysarum paniculatum* =  
     *Desmodium paniculatum*  
*Hedysarum repens* =  
     *Lespedeza repens*  
*Hedysarum violaceum* =  
     *Lespedeza violacea*  
*Hedysarum virginicum* =  
     *Lespedeza virginica*  
*Hedysarum viridiflorum* =  
     *Desmodium viridiflorum*  
*Hedysarum volubile* =  
     *Galactiavolubilis*  
*Helianthus laevis* =  
     *Bidens laevis*  
*Helianthus multiflorus* =  
     *Helianthus decapetalus*  
*Helleborus trifolius* =  
     *Coptis trifolia*  
*Hibiscus palustris* =  
     *Hibiscus moscheutos*  
*Hibiscus virginicus* =  
     *Kosteletzkya virginica*  
*Hippophae canadensis* =  
     *Shepherdia canadensis*  
*Holcus laxus* =  
     *Uniola laxa*  
*Holcus striatus* =  
     *Sacciolepis striata*  
*Holosteum succulentum* =  
     *Honkenya peploides*  
*Horminum virginicum* =  
     *Salvia lyrata*  
*Hyoseris virginica* =  
     *Krigia virginica*  
*Hypericum lasianthus* =  
     *Gordonia lasianthus*  
*Hyssopus nepetoides* =  
     *Agastache nepetoides*  
*Ipomoea nyctelea* =  
     *Ellisia nyctelea*  
*Ipomoea tamnifolia* =  
     *Jacquemontia tamnifolia*  
*Juglans alba* =  
     *Carya tomentosa*  
*Juncus campestris* =  
     *Luzula campestris*  
*Jussiaea erecta* =  
     *Ludwigia erecta*  
*Laurus aestivalis* =  
     *Litsea aestivilis*  
*Laurus benzoin* =  
     *Lindera benzoin*  
*Laurus borbonia* =  
     *Persea borbonia*  
*Laurus indica* =  
     *Persea indica*  
*Laurus sassafras* =  
     *Sassafras albidum*  
*Laurus winterana* =  
     *Canella winterana*  
*Lechea major* =  
     *Helianthemum canadense*  
*Leontice thalictroides* =  
     *Caulophyllum thalictroides*  
*Leontodon dandelion* =  
     *Krigia dandelion*  
*Lilium camschatcense* =  
     *Fritillaria camschatcensis*  
*Limodorum tuberosum* =  
     *Calopogon tuberosus*  
*Liquidambar peregrina* =  
     *Comptonia peregrina*  
*Lithospermum virginianum* =  
     *Onosmodium virginianum*

- Loniceria marilandica* =  
     *Spigelia marilandica*  
*Loniceria symphoricarpos* =  
     *Symphoricarpos orbiculata*  
*Lycopodium apodum* =  
     *Selaginella apoda*  
*Lycopsis virginica* =  
     *Myosotis verna*  
*Lythrum petiolatum* =  
     *Cuphea petiolata*  
*Magnolia virginiana*  
     var. *acuminata* =  
     *Magnolia acuminata*  
*Magnolia virginiana*  
     var. *foetida* =  
     *Magnolia grandiflora*  
*Magnolia virginiana*  
     var. *glauca* =  
     *Magnolia virginiana*  
*Magnolia virginiana*  
     var. *grisea* =  
     *Magnolia virginiana*  
*Magnolia virginiana*  
     var. *tripetala* =  
     *Magnolia tripetala*  
*Malva caroliniana* =  
     *Modiola caroliniana*  
*Medicago virginica* =  
     *Lespedeza virginica*  
*Melissa nepeta* =  
     *Calamintha nepeta*  
*Melissa pulegioides* =  
     *Hedeoma pulegioides*  
*Menispermum carolinum* =  
     *Cocculus carolinus*  
*Menispermum virginicum* =  
     *Cocculus carolinus*  
*Mentha spicata* var. *viridis* =  
     *Mentha spicata*  
*Mespilus arbutifolia* =  
     *Aronia arbutifolia*  
*Mespilus canadensis* =  
     *Amelanchier canadensis*  
*Monarda ciliata* =  
     *Blephilia ciliata*  
*Monotropa hypopithys* =  
     *Hypopithys monotropa*  
*Myosotis virginiana* =  
     *Hackelia virginiana*  
*Myrica asplenifolia* =  
     *Comptonia cerifera*  
*Myrica cerifera* =  
     *Comptonia cerifera*  
*Napaea hermaphrodita* =  
     *Sida hermaphrodita*  
*Nymphaea lutea* =  
     *Nuphar luteum*  
*Nymphaea nelumbo* =  
     *Nelumbo lutea* (ours)  
*Ophiorrhiza mitreola* =  
     *Cynoctonum mitreola*  
*Ophrys lilifolia* =  
     *Liparis linifolia*  
*Orchis ciliaris* =  
     *Platanthera ciliaris*  
*Orchis flava* =  
     *Platanthera flava*  
*Orchis psycodes* =  
     *Platanthera psycodes*  
*Orchis spectabilis* =  
     *Galearis spectabilis*  
*Ornithogalum bivale* =  
     *Allium bivale*  
*Ornithogalum hirsutum*  
     *Hypoxis hirsuta*  
*Orbanche virginiana* =  
     *Epifagus virginiana*  
*Osmunda virginiana* =  
     *Botrychium virginianum*  
*Osteospermum uvedalia* =  
     *Smallanthus uvedalia*  
*Oxalis longiflora* =  
     *Oxalis violacea*  
*Pancratium carolinianum* =  
     *Hymenocallis caroliniana*  
*Panicum clandestinum* =  
     *Dichanthelium clandestinum*  
*Panicum crusgalli* =  
     *Echinochloa crusgalli*  
*Panicum dichotomum* =  
     *Dichanthelium dichotomum*  
*Panicum dissectum* =  
     *Paspalum dissectum*  
*Panicum filiforme* =  
     *Digitaria filiformis*  
*Panicum glaucum* =  
     *Setaria glauca*  
*Panicum italicum* =  
     *Setaria italica*  
*Panicum latifolium* =  
     *Dichanthelium latifolium*  
*Panicum sanguinale* =  
     *Digitaria sanguinalis*  
*Phalaris oryzoides* =  
     *Leersia oryzoides*  
*Phaseolus helvulus* =  
     *Strophostyles helvola*  
*Phlox ovata* =  
     *Ruellia caroliniensis*  
*Phlox setacea* =  
     *Phlox subulata* var.  
         *setacea*  
*Pinus balsamea* =  
     *Abies balsamea*  
*Pistacia simaruba* =  
     *Bursera simaruba*  
*Poa capillaris* =  
     *Eragrostis capillaris*  
*Poa flava* =



- Tridens flavus  
 Podophyllum diphyllum =  
     Jeffersonia diphylla  
 Polemonium dubium =  
     Phacelia dubia  
 Polygala viridescens =  
     Polygala sanguinea  
 Polygonum articulatum =  
     Polygonella articulata  
 Polypodium bulbiferum =  
     Cystopteris bulbifera  
 Polypodium lonchitis =  
     Polystichum lonchitis  
 Polypodium marginale =  
     Dryopteris marginalis  
 Polypodium noveboracense =  
     Thelypteris noveboracensis  
 Polypodium phegopteris =  
     Thelypteris phegopteris  
 Prinos glaber =  
     Ilex glabra  
 Prinos verticillatus =  
     Ilex verticillata  
 Pteris atropurpurea =  
     Pellaea atropurpurea  
 Pulmonaria virginica =  
     Mertensia virginica  
 Pyrus coronaria =  
     Malus coronaria  
 Queria canadensis =  
     Paronychia canadensis  
 Renealmia usneoides =  
     Tillandsia usneoides  
 Rhinanthus virginica =  
     Aureolaria virginica  
 Rhus radicans =  
     Toxicodendron radicans  
 Rhus toxicodendron =  
     Toxicodendron quercifolia  
 Rhus vernix =  
     Toxicodendron vernix  
 Rudbeckia oppositifolia =  
     Kallias helianthoides  
 Rudbeckia purpurea =  
     Echinacea purpurea  
 Sagina virginica =  
     Bartonia virginica  
 Salsola prostrata =  
     Kochia prostrata  
 Sarothra gentianoides =  
     Hypericum gentianoides  
 Satureja origanoides =  
     Cunila origanoides  
 Satureja virginiana =  
     Pycnanthemum virginianum  
 Scandix cerefolium =  
     Anthriscus cerefolium  
 Scandix procumbens =  
     Chaerophyllum procumbens  
 Schoenus glomeratus =  
     Rhyschospora glomerata  
 Scirpus retrofractus =  
     Cyperus retrofractus  
 Scirpus spadiceus =  
     Fimbristylis spadicea  
 Scutellaria hyssopifolia =  
     Scutellaria integrifolia  
 Senecio hieracifolius =  
     Erechtites hieracifolia  
 Serratula glauca =  
     Vernonia glauca  
 Serratula noveboracensis =  
     Vernonia noveboracensis  
 Serratula praealta =  
     Vernonia noveboracensis  
 Serratula scariosa =  
     Liatris scariosa  
 Serratula spicata =  
     Liatris spicata  
 Serratula squarrosa =  
     Liatris squarrosa  
 Sida abutilon =  
     Abutilon theophrastii  
 Sida crispa =  
     Malva crispa  
 Sigesbeckia occidentalis =  
     Verbesina occidentalis  
 Silphium helianthoides =  
     Kallias helianthoides  
 Silphium solidaginoides =  
     Kallias helianthoides  
 Sison canadense =  
     Cryptotaenia canadensis  
 Sisymbrium nasturtium-aquaticum =  
     Nasturtium officinale  
 Sium rigidius =  
     Oxypolis rigidus  
 Smilax caduca =  
     Smilax rotundifolia  
 Smyrnum aureum =  
     Zizia aurea  
 Smyrnum integerrimum =  
     Taenidia integerrima  
 Solidago altissima =  
     Solidago canadensis  
 Solidago lateriflora =  
     Aster lateriflorus  
 Solidago latifolia =  
     Solidago flexicaulis  
 Sonchus floridanus =  
     Lactuca floridana  
 Sophora tinctoria =  
     Baptisia tinctoria  
 Spiraea aruncus =  
     Aruncus sylvestris  
 Spiraea opulifolia =  
     Physocarpus opulifolius  
 Spiraea trifoliata =

Porteranthus trifolius  
 Statice armeria =  
   Armeria maritima  
 Swertia difformis =  
   Sabatia difformis  
 Teucrium chamaepitys =  
   Ajuga chamaepitys  
 Teucrium virginicum =  
   Teucrium canadense  
 Thapsia trifoliata =  
   Thaspium trifoliatum  
 Thesium umbellatum =  
   Comandra umbellata  
 Tragopogon virginicum =  
   Krigia virginica  
 Trifolium biflorum =  
   Stylosanthes biflora  
 Uniola spicata =  
   Distichlis spicata  
 Urtica canadensis =  
   Laportea canadensis  
 Urtica cylindrica =  
   Boehmeria cylindrica  
 Urtica divaricata =  
   Laportea canadensis  
 Urtica pumila =  
   Pilea pumila  
 Vaccinium frondosum =  
   Gaylussacia frondosa  
 Vaccinium hispidulum =  
   Gaultheria hispidula  
 Vaccinium ligustrinum =  
   Lyonia ligustrina  
 Vaccinium mucronatum =  
   Nemopanthus mucronata  
 Valeriana locusta var. radiata  
   = Valerianella radiata  
 Veratrum luteum =  
   Chamaelirium luteum  
 Verbena nodiflora =  
   Lippa nodiflora  
 Verbena spuria =  
   Verbena officinalis  
 Verbesina alba =  
   Eclipta alba  
 Veronica marilandica =  
   Polypremum procumbens  
 Veronica virginica =  
   Veronicastrum virginicum  
 Viscum rubrum =  
   Phoradendron rubrum  
 Viscum terrestre =  
   Lysimachia terrestris  
 Vitis arborea =  
   Ampelopsis arborea  
 Vitis laciniosa =  
   Vitis vulpina

From the raw data above, it can be noted that Linnaeus

mentions 889 species from temperate North America. Of that number 13 are varieties leaving a total of 876 species. Two of the varieties, *Magnolia virginiana* var. *glauc* and *Solanum nigrum* var. *vulgare*, can be considered equivalent to the modern declarations of var. *virginiana* and var. *nigrum* in each instance. One species, *Ornithogalum canadense*, is based solely upon South African material and Linnaeus misnamed it. Most likely he meant "capense".

Linnaeus gives habitat references for nearly all of his species. In the above review, 108 are referred to "America". This was variously defined by Linnaeus to include North America or the Americas, meaning both North and South America. Those species which are strictly stated by Linnaeus to be only from South America (but have synonymies based on North American elements) are not included. Canada is given for 162 species, while 80 (including five varieties of *Magnolia virginiana*) are given as occurring in the Carolinas. Maryland is credited with a total of 18 species with Pennsylvania (or Philadelphia) given for 44 species. Linnaeus assigns four species to Florida, two to Mississippi, five to New York, and one each to New England and New Jersey. The largest number of species are referred to Virginia. He refers 421 species and varieties to Virginia.

To be sure Linnaeus often referred a species to more than a single area, and thus the total is greater than the number of species considered, by Linnaeus, to be strictly from these areas. Even so, fully 47% of the species considered by Linnaeus to be from temperate North America (even if not stated as such) were considered to occur in Virgi-

nia. Only 18% of the plants were mentioned as being from Canada, while 12% came from America.

A number of temperate North American species were mentioned in Linnaeus' first edition of *Species plantarum* in synonymy, but the geographic range given by him did not include an area within temperate North America. Linnaeus gives the range of 47 species as occurring somewhere in the New World but not specifically in the temperate region. For 86 species Linnaeus gives the range as occurring in both temperate North America and somewhere else in the World. This usually refers to species which Linnaeus believed occurred in both Europe and the Americas. In 79 instances, synonyms based on temperate North American species are cited, but the geographical range does not even mention the New World or temperate North America. Mostly, Linnaeus is referring to weed species gathered in temperate North America prior to 1753.

Linnaeus named 14 species for America, 37 for Canada, 10 for the Carolinas, nine for Maryland, four for New York, five for Pennsylvania or Philadelphia, and 63 for Virginia. He named one species each for Florida and New England.

Linnaeus named some North American species for early explorers. Three species were named for Peter Kalm (*Hieracium kalmii*, *Hypericum kalmianum* and *Lobelia kalmii*), and one each for Clayton (*Osmunda claytoniana*) and Tradescant (*Aster tradescantii*). He did name species for others, of which three may be mentioned: *Hieracium gronovii*, *Lobelia cliffortiana* and *Thalictrum cornutii*.

#### EVALUATION OF SPECIES PUBLISHED IN *SPECIES PLANTARUM*

In attempting to evaluate the contents of Carl Linnaeus' first edition of *Species plantarum* for those species of vascular plants he attributes to temperate North America it is necessary to consider the conditions under which Linnaeus labored, and his abilities to resolve problems long associated with efforts to produce a world's flora. To begin, it is useful to start with the status of the collections available to him, and then turn to the literature already published which Linnaeus had access to. As shall become obvious, the two are not entirely mutually inclusive.

Over Linnaeus' life time he gathered a herbarium of some 16,000 specimens. Today specimens once in his possession are located in England, Sweden and France. The gathering of plants with the intention of making permanent collections of dried specimens began in the early 1500s and was a well established practice when Linnaeus began his own botanical explorations on an expedition to Lapland in 1732. The older herbaria consisted largely of bound volumes, or *hortus siccus*, into which specimens were glued in a predetermined order. Typically the plant specimens were arranged according to some system of classification, according to geographical location, or even randomly. A few workers maintained their collections loose between sheets of brown paper. In either cases, notations as to collector, place of origin, or even the scientific name may or may not be affixed to the specimen. In the better collections, such data were retained. Unfortunately, few such collections exist. As



the herbarium developed, more and more workers realized the inherent difficulties of the inflexibility of bound volumes and moved to individual sheets. As workers had done with the bound volumes, often several species were placed on a single sheet, but in time, a single specimen was placed on a sheet so as to allow absolute freedom in rearranging the entire collection as the newer systems of classifications were developed.

Most of the herbaria made prior to the Linnaean era were arranged in bound volumes. Linnaeus departed from this practice, as did Sherard and Dillenius for example. Unlike his Oxford colleagues who placed one or more collections on the same sheet, Linnaeus usually glued a single collection to a sheet. None of these men was consistent in their annotations, although Sherard, Dillenius and Gronovius in Holland were far more consistent in this practice than Linnaeus. While most workers wrote onto a label who collected each specimen, and from where it came, this was not at all a consistent practice. Dale and Du Bois were far more consistent in this practice than most. Petiver, in spite of his chaotic collections, maintained good records but apparently was of the practice of giving away specimens. To record what he had seen he would add the collector and his data to preexisting labels compounding the identification of many his specimens. Sloane, Ray, and Plukenet were not at all consistent in their herbarium skills. Sloane kept only the briefest records of his own collections, and retained almost none for the specimens he received from others. Ray failed to retain nearly all of the data he might have received and was constantly rear-

ranging his collections to fit into his latest scheme of classification. As for Plukenet, he kept some records, but for the most part, his bound volumes of dried plants are remarkably void of collecting data. This is somewhat overcome by the identifications associated with each specimen (when annotated) as these can be used to trace a collection to a particular collector.

For Linnaeus, few of the extant collections made by other botanists prior to 1753 were consulted. He examined the collection made by Joachim Burser, but these were only of Old World species. Linnaeus also examined some of the collections in the Sherardian and Dillenian herbaria at Oxford University, but the extent to which he reviewed these holdings is unknown. Linnaeus did not see the vast holdings owned by Sir Hans Sloane when he visited England in 1736. Thus, the rich array of specimens gathered by Plukenet, Petiver, Sloane and many others were not studied by him. Likewise, the large Catesby collections ultimately obtained by Sloane were not examined in London although Linnaeus certainly saw duplicates sent to Sherard and Dillenius at Oxford. Linnaeus states that he saw the collections of Tournefort, Vaillant and Jussieu in France, but it is unlikely that he spent much time evaluating their contents. Linnaeus also visited Phillip Miller in London and Peter Collinson, but it is not known to what extent Linnaeus examined their gardens or reviewed their herbaria. Most likely, any such examination was highly superfluous. However, in many instances, Linnaeus received specimens from these men, or exchanged plant collections with them so that Linnaeus had access to many of their more unique species.

During the Linnaean years abroad in Holland he worked closely with three men and was able to examine not only their libraries and gardens, but in some cases, exotic collections of dried herbarium material. With the assistance of George Clifford, Linnaeus was able to study the Clifford garden in great detail, make herbarium specimens, and to prepare an illustrated volume treating the species in and around the Clifford estate. This book was published in 1738. The specimens remained with Clifford and eventually came to the British Museum (Natural History) in London where they may be examined today. Thus, when Linnaeus was preparing *Species plantarum* in 1751 and 1752, he did not have direct access to these specimens.

Linnaeus also aided Adriaan van Royen, a professor of botany at Leyden. His book, *Florae leydensis prodromus*, was published in 1740. It is unclear what role Linnaeus played in the production of this work, but it is certain that Linnaeus must have aided him in the assignment of synonymies and the literature he cites.

The third man was Gronovius, an amateur botanist, with a large library and herbarium. In assisting Gronovius with his *Flora virginica*, Linnaeus was able to examine many of the temperate North American collections of John Clayton. It is likely that Linnaeus saw most of the species reported in the first part of that work (published in 1739), but it is uncertain to what extent Linnaeus examined Clayton material cited in the second part (published in 1743). Gronovius sent a number of Clayton specimens to Linnaeus, and these are extant in the Linnaean Herbarium in London.

Significant collections of vascular plants came to Linnaeus from a number of sources. For temperate North America the most significant holdings available to Linnaeus while writing *Species plantarum* were those provided by Peter Kalm. Linnaeus heavily relied upon these specimens to determine species circumscriptions. In some cases, the Virginia specimens Linnaeus examined earlier proved to be somewhat different from the specimens found by Kalm, and Linnaeus was not in a position to differentiate between them inasmuch as he no longer had access to Clayton material.

Of the two collectors, Clayton and Kalm, it can be seen from the listings given above that Linnaeus cited John Clayton material more frequently than he did that gathered by Peter Kalm. In part this is due to the greater number of species found by Clayton compared to Kalm, but an additional factor is that many of the Kalm collections in the Linnaean Herbarium in London likely are not identified as such and cannot be presently assigned to him. Continued studies of the herbarium holdings available to Linnaeus will likely result in an increase in the number of Kalm specimens. This can be accomplished, in part, by examining the Kalm collections found elsewhere. It is interesting to note that when one compares the Kalm species with those cited by Linnaeus as originating from Canada or Pennsylvania there is a close relationship. In some instances, the Canada reference is based on a Cornuti polynomial or some other name that clearly establishes Canada as the source of the name.

In a number of instances, Linnaeus saw both Clayton and Kalm material of plants which

he took to represent the same species. For the most part, Linnaeus cites both Virginia and Canada as the sources of the species, but in some instances he gives only Virginia. In the following listing, species of temperate North American vascular plants are given which the available evidence indicates were collected by both men. In addition, the geographic source(s) of the species is given only as they are applicable to those parts of temperate North America where the two men botanized (A= America; C= Canada; NY= New York; P= Pennsylvania; V= Virginia; N= none of the above; X= no geographic data given):

Acalypha virginica - V  
 Acer negundo - V  
 Acer rubrum - P, V  
 Adiantum pedatum - C, V  
 Agrostis virginica - V  
 Andromeda mariana - V  
 Andromeda paniculata - V  
 Andropogon nutans - V  
 Anemone thalictroides - C, V  
 Anemone virginiana - V  
 Angelica sylvestris - N  
 Antirrhinum canadense - C, V  
 Apocynum cannabinum - C, V  
 Arabis canadensis - A  
 Arabis lyrata - C  
 Aralia spinosa - V  
 Arenaria rubra var. marina - N  
 Arethusa bulbosa - C, V  
 Arethusa ophioglossoides - C, V  
 Aristolochia serpentaria - V  
 Asarum canadense - C  
 Asclepias nivea - V  
 Aster concolor - V  
 Astragalus canadensis - C, V  
 Azalea viscosa - V  
 Bartsia coccinea - NY, V  
 Briza eragrostis - N  
 Calacia atriplicifolia - C, V  
 Ceanothus americanus - V  
 Celtis occidentalis - V  
 Cenchrus tribuloides - V  
 Cephalanthus occidentalis - A  
 Cercis canadensis - V  
 Chaerophyllum arborescens - V  
 Chelone glabra - C, V  
 Cicutula bulbifera - C, V

Cicutula maculata - V  
 Claytonia virginica - V  
 Convolvulus spithameus - V  
 Cornus florida - V  
 Cracca virginiana - C, V  
 Crataegus coccinea - C, V  
 Crataegus crus-galli - X  
 Crataegus tomentosa - V  
 Crotalaria sagittalis - V  
 Cucubalus stellatus - C, V  
 Cuscuta americana - V  
 Dianthera americana - V  
 Diospyros virginiana - A  
 Dracontium foetidum - V  
 Euphorbia corollata - C, V  
 Euphorbia ipecacuanhae - C, V  
 Euphorbia polygonifolia - C, V  
 Euonymus americanus - V  
 Fagus pumila - A  
 Geranium carolinianum - V  
 Gerardia flava - C, V  
 Gerardia pedicularia - C, V  
 Gerardia purpurea - C, V  
 Gleditsia triacanthos - V  
 Glycine apios - V  
 Glycine bracteata - V  
 Glycine comosa - V  
 Gnaphalium obtusifolium - P, V  
 Gnaphalium plantaginifolium - V  
 Gnaphalium purpureum - P, V  
 Gratiola virginiana - V  
 Hamamelis virginiana - V  
 Hedera quinquefolia - C  
 Hedysarum hirtum - V  
 Hedysarum violaceum - V  
 Heuchera americana - V  
 Hibiscus palustris - C, V  
 Hieracium gronovii - P, V  
 Houstonia caerulea - V  
 Houstonia purpurea - V  
 Hydrangea arborescens - V  
 Hydrocotyle umbellata - A  
 Hyoseris virginica - V  
 Hypericum canadense - C  
 Hypericum mutilum - C, V  
 Iris verna - V  
 Juglans alba - V  
 Laurus sassafras - V  
 Limodorum tuberosum - A  
 Liquidambar styraciflua - V  
 Liriodendron tulipifera - A  
 Lobelia cliffortiana - C, V  
 Ludwigia alternifolia - V  
 Lupinus perennis - V  
 Medeola virginiana - V  
 Melanthium virginicum - V  
 Melissa pulegioides - C, V  
 Menispermum canadense - C, V  
 Mespilus canadensis - C, V



*Mollugo verticillata* - V  
*Monotropa uniflora* - C, V  
*Nyssa aquatica* - A  
*Oenothera fruticosa* - V  
*Ophrys lilifolia* - C, V  
*Orchis psychodes* - C  
*Ornithogalum hirsutum* - C, V  
*Orobanche virginiana* - V  
*Osmunda regalis* - V  
*Osmunda virginiana* - A  
*Oxalis stricta* - V  
*Oxalis violacea* - C, V  
*Panax quinquefolius* - C, P, V  
*Panicum dichotomum* - V  
*Pinus taeda* - C, V  
*Plantago virginica* - V  
*Poa capillaris* - C, V  
*Polygala verticillata* - V  
*Polygala viridescens* - V  
*Pontedaria cordata* - V  
*Prenanthes alba* - P, V  
*Prinos verticillatus* - V  
*Pteris atropurpurea* - V  
*Pulmonaria virginica* - V  
*Pyrola maculata* - A  
*Quercus alba* - V  
*Quercus nigra* - A  
*Quercus phellos* - A  
*Quercus prinus* - A  
*Quercus rubra* - V  
*Ranunculus abortivus* - C, V  
*Rhexia virginica* - V  
*Rhus glabra* - A  
*Rhus radicans* - C, V  
*Rhus toxicodendron* - C, V  
*Rhus vernix* - A  
*Salvia lyrata* - V  
*Sanguinaria canadensis* - A  
*Sarothra gentianoides* - P, V  
*Satureja origanoides* - V  
*Saxifraga nivalis* - C, V  
*Saxifraga pennsylvanica* - C, P,  
V  
*Schoenus glomeratus* - V  
*Scirpus capitatus* - V  
*Scutellaria hyssopifolia* - V  
*Scutellaria integrifolia* - C,  
V  
*Serratula spicata* - A  
*Silene virginica* - V  
*Sison canadense* - A  
*Sisyrinchium bermudiana* - V  
*Smilax pseudo-china* - V  
*Smyrnum aureum* - A  
*Solidago canadensis* - C, V  
*Sonchus canadensis* - C  
*Sophora tinctoria* - V  
*Spiraea opulifolia* - C, V  
*Spiraea trifoliata* - C, V  
*Thapsia trifoliata* - V

*Tragopogon virginicus* - C, V  
*Trifolium biflorum* - C, V  
*Ulmus americana* - V  
*Uniola spicata* - A  
*Urtica cylindrica* - C, V  
*Urtica pumila* - C  
*Utricularia subulata* - V  
*Uvularia perfoliata* - C, V  
*Vaccinium frondosum* - A  
*Vaccinium stamineum* - A  
*Veratrum luteum* - C, V  
*Viburnum acerifolium* - V  
*Viburnum prunifolium* - C, V  
*Viola pedata* - V  
*Vitis vinifera* - N  
*Xyris indica* - N

As can be seen from the above summary, Linnaeus had both Clayton and Kalm material for 170 species, of which 8 were referred only to Canada, 79 only to Virginia, and only 22 to America. A total of 47 species were referred to Canada and Virginia, 7 to Pennsylvania and Virginia, and one to New York and Virginia. As Kalm material came into Linnaeus' possession well after he had formulated many of his opinions regarding species, it is not unusual to see a debate in the literature over the selection of a Clayton specimen or a Kalm collection as a suitable lectotype. This cannot be resolved at this point, but it is well to consider that while in many instances Linnaeus does not give Canada or Pennsylvania as the only location for a combination Clayton-Kalm species, he does give many species with Virginia as the only location. It is possible, therefore, that Linnaeus had already established the definition of the species on material other than the Kalm collection in his herbarium. Thus, while he used Kalm specimens to assist him in his characterization, he likely did not base his circumscription initially upon that Kalm collection.

When Linnaeus wrote *Species plantarum* in 1753, some

species from temperate North America were described based only upon a single reference and/or collection. Of these, the majority are, as one would suspect, Clayton or Kalm specimens. The following breakdown is based solely upon single author or collector references in *Species plantarum*. In those instances where there is a specimen in the Linnaean Herbarium in London that seems to be different from the author of the synonym or the collector mentioned in the reference given by Linnaeus, a star (\*) is given. The reader is urged to consult *Species plantarum* for the places of publication.

#### Bauhin

*Othonna cineraria*

#### Catesby

*Annona glabra*  
*Annona triloba*\*  
*Bignonia caerulea*  
*Cissampelos smilacina*  
*Ipomoea carolina*  
*Magnolia virginiana*  
     var. *tripetala*  
*Panocratium carolinianum*  
*Philadelphus inodorus*  
*Sloanea emarginata*  
*Smilax tannoides*\*  
*Viscum purpureum*\*  
*Viscum rubrum*

#### Clayton

*Agrostis virginica*\*  
*Alisma subulata*  
*Amaranthus graecizans*  
*Ammannia ramosior*  
*Andropogon divaricatum*  
*Antirrhinum canadense*\*  
*Arabis lyrata*\*  
*Asclepias rubra*  
*Aster concolor*\*  
*Aster rigidus*  
*Aster vernus*  
*Betula lenta*\*  
*Buchnera americana*  
*Chironia dodecandra*  
*Convolvulus panduratus*  
*Convolvulus spithameus*\*  
*Coreopsis angustifolia*  
*Crateagus tomentosa*\*  
*Crataegus viridis*

*Cynoglossum virginianum*\*  
*Dactylis cynosuroides*\*  
*Dianthera americana*\*  
*Dirca palustris*\*  
*Dolichos polystachyus*  
*Dolichos regularis*  
*Elephantopus tomentosus*  
*Elymus hystrix*  
*Ferula canadensis*  
*Glycine bracteata*\*  
*Gratiola dubia*  
*Gratiola virginiana*\*  
*Hedysarum frutescens*  
*Hedysarum hirtum*\*  
*Hedysarum nudiflorum*  
*Hedysarum repens*\*  
*Hedysarum violaceum*\*  
*Hedysarum virginicum*\*  
*Hedysarum viridiflorum*  
*Helianthus laevis*  
*Hieracium gronovii*\*  
*Holcus laxus*  
*Holcus striatus*  
*Hydrangea arborescens*\*  
*Hyoseris virginica*\*  
*Hypericum mutilum*\*  
*Ipomoea nyctelea*\*  
*Iris virginica*\*  
*Laurus aestivalis*  
*Leontodon dandelion*  
*Linum virginianum*\*  
*Lycopsis virginica*  
*Lycopus virginicus*\*  
*Lythrum lineare*  
*Lythrum petiolatum*  
*Lythrum verticillatum*\*  
*Melanthium virginicum*\*  
*Melissa pulegioides*  
*Mespilus canadensis*\*  
*Monarda clinopodia*\*  
*Orchis flava*  
*Orchis spectabilis*  
*Ornithogalum bivale*  
*Osmunda claytoniana*  
*Panicum dichotomum*\*  
*Panicum virgatum*  
*Phalaris oryzoides*\*  
*Polemonium dubium*  
*Prinos verticillatus*\*  
*Pteris atropurpurea*\*  
*Pyrus coronaria*\*  
*Queria canadensis*\*  
*Rhinanthus virginica*\*  
*Rudbeckia oppositifolia*  
*Rumex verticillatus*  
*Sagina virginica*  
*Salicornia virginica*  
*Schoenus glomeratus*\*  
*Scirpus capitatus*\*  
*Sigesbeckia occidentalis*

*Silene virginica*\*  
*Silphium solidaginoides*  
*Smyrniurn integerrimum*  
*Sonchus canadensis*\*  
*Stipa avenacea*  
*Swertia difformis*  
*Teucrium virginicum*  
*Thapsia trifoliata*\*  
*Tragopogon virginicum*\*  
*Ulmus americana*\*  
*Uniola spicata*\*  
*Urtica pumila*\*  
*Utricularia gibba*\*  
*Utricularia subulata*  
*Vaccinium frondosum*\*  
*Verbesina virginica*  
*Veronica marilandica*  
*Viburnum acerifolium*\*  
*Viburnum nudum*  
*Viola primulifolia*\*  
*Xyris indica*\*

#### Collinson

*Podophyllum diphyllum*\*

#### Colden

*Uvularia sessilifolia*\*

#### Dillenius

*Asclepias amoenae*  
*Aster miser*  
*Carduus altissimus*  
*Chenopodium anthelminticum*\*  
*Clematis crispa*\*  
*Convolvulus carolinus*  
*Crotalaria perfoliata*  
*Ipomoea lacunosa*  
*Ipomoea tamnifolia*  
*Lycopodium apodum*\*  
*Lycopodium carolinianum*  
*Lycopodium obscurum*\*  
*Polemonium rubrum*\*  
*Rosa carolina*\*  
*Ruellia biflora*  
*Solanum nigrum*  
     *var. virginicum*  
*Trichostema brachiatum*\*  
*Triosteum perfoliatum*

#### Kalm

*Acer pensylvanicum*  
*Acer saccharinum*  
*Allium canadense*  
*Amaranthus retroflexus*  
*Andromeda racemosa*  
*Aster laevis*  
*Avena pensylvanica*  
*Avena spicata*  
*Bromus ciliatus*  
*Carex folliculata*

*Carex squarrosa*  
*Chenopodium virginicum*  
*Chironia angularis*  
*Chironia campanulata*  
*Chrysocoma graminifolia*  
*Cinna arundinacea*  
*Cistus canadensis*  
*Dalibarda repens*  
*Datisca hirta*  
*Erigeron philadelphicus*  
*Galium tinctorium*  
*Galium trifidum*  
*Gentiana quinquefolia*  
*Gentiana villosa*  
*Helianthus decapetalus*  
*Hieracium kalmii*  
*Hieracium paniculatum*  
*Hippophae canadensis*  
*Hordeum jubatum*  
*Hydrocotyle americana*  
*Hypericum canadense*  
*Hypericum kalmianum*  
*Liquidambar peregrina*  
*Mentha canadensis*  
*Ophrys cernua*  
*Panicum filiforme*  
*Polygala sanguinea*  
*Polygonum articulatum*  
*Polygonum erectum*  
*Polygonum pensylvanicum*  
*Polypodium marginale*  
*Polypodium noveboracense*  
*Potentilla canadensis*  
*Prinos glaber*  
*Ribes cynosbati*  
*Rubus canadensis*  
*Rubus hispidus*  
*Sambucus canadensis*  
*Senecio canadensis*  
*Smilax caduca*  
*Smilax rotundifolia*  
*Solidago lateriflora*  
*Thalictrum dioicum*  
*Urtica capitata*  
*Vaccinium album*  
*Vaccinium corymbosum*  
*Vaccinium ligustrinum*  
*Vaccinium mucronatum*  
*Viburnum lentago*  
*Viscum terrestre*

#### Linnaeus

*Cacalia suaveolens*  
*Gomphrena serrata*  
*Guilandina dioica*  
*Helleborus trifolius*  
*Lechea major*  
*Lilium camschatcensis*  
*Menispermum carolinum*  
*Oxalis longiflora*\*



*Physalis pruinosa*  
*Polymnia canadensis*\*  
*Rumex persicarioides*  
*Salsola prostrata*  
*Solidago noveboracensis*  
*Swertia corniculata*\*  
*Thalictrum purpurascens*  
*Viburnum dentatum*  
*Viola canadensis*\*  
*Viola lanceolata*\*

#### Mitchell

*Chelone penstemon*\*

#### Morison

*Helianthus divaricatus*\*

#### Petiver

*Clitoria mariana*

#### Plukenet

*Anemone quinquefolia*\*  
*Ascyrum villosum*  
*Aster mutabilis*  
*Aster tenuifolius*\*  
*Conyza asteroides*\*  
*Conyza bifrons* var. *flosculosa*  
*Conyza linifolia*  
*Cupressus thyoides*\*  
*Euphorbia maculata*  
*Morus rubra*\*  
*Phlox divaricata*\*  
*Phlox ovata*\*  
*Phlox paniculata*\*  
*Phlox setacea*  
*Phlox subulata*  
*Rhexia mariana*  
*Scirpus retrofractus*\*  
*Solidago latifolia*\*  
*Spiraea tomentosa*  
*Thesium umbellatum*\*  
*Urtica divaricata*\*

#### Plumier

*Silphium laciniatum*

#### Ray

*Magnolia virginiana*  
     var. *grisea*  
*Phlox maculata*\*  
*Polygala incarnata*\*

#### Tournefort

*Lobelia kalmii*\*

#### van Royen

*Bidens bullata*  
*Gomphrena interrupta*

credited to temperate North America by Linnaeus in the first edition of *Species plantarum*, 241, or about 27% were based on a single reference. In giving a single reference, Clayton material is mentioned for 100 species and Kalm for 60 species. For 49 of the 100 Clayton species, Linnaeus had other specimens. In nearly all instances, the additional material was a Kalm collection which is now found in Linnaeus' herbarium in London.

For the remaining names based on a single reference, the majority were established on illustrations in books published by the authors mentioned above. Linnaeus credits Catesby as the basis of 12 of his species. In three instances Linnaeus had other material in his herbarium to augment the illustrations published by Catesby. As for Dillenius, who Linnaeus mentions as his only reference for 18 species, he had other material for seven of those species. Plukenet is mentioned as Linnaeus' only source of information for 21 species. Of that number, however, Linnaeus had additional material in only 11 instances. All of these authors illustrated their works, true, but it is significant that of these particular authors -- Catesby, Dillenius and Plukenet -- Linnaeus may well have been able to examine actual specimens as well as the illustrations. Collections at the University of Oxford are extant with many of the polynomials mentioned by Linnaeus in synonymy, and it is likely that Linnaeus was able to associate specific names with certain species only as a result of his examination of the Sherardian and Dellinian herbaria at Oxford.

It is significant that by the late 1740s when Mitchell published his work on new

Of the some 889 species

genera that Linnaeus had additional information relative to all but one. Mitchell is cited 13 times in the first edition of *Species plantarum*, but only once is he the sole source of information. This is the case of *Chelone penstemon*, a plant Mitchell proposed to recognize as a new genus, *Penstemon*. Even so, Linnaeus had other specimens at hand and did not need to rely only upon Mitchell's publications. As for van Royen who Linnaeus assisted, he gives him as the only reference in two species; in neither case did Linnaeus have supplementary material in his herbarium.

As already noted, Linnaeus was unable to see the original herbarium material gathered by a number of workers. Thus, he had to rely upon the illustrations prepared by these workers for the characterization and identification of many species.

For his study of temperate North American species, the work of Gronovius proved particularly significant. Not only did Linnaeus examine the collections made by Clayton which were described in the 1739 part of *Flora virginica*, but he aided Gronovius in the determination of synonyms. Additionally, Linnaeus received many subsequent specimens from Gronovius of Clayton's Virginia discoveries, and these too were evaluated by him and synonymies determined. Of specific interest is the relationship between the Gronovius flora and those works on American botany published prior to 1739.

In the following listing, Gronovius citations given by Linnaeus in the first edition of *Species plantarum* are reviewed, and the synonyms cited by both Gronovius and Linnaeus are listed for each species.

The following abbreviations are used: BR = Breynius; CA = Catesby; CM = Commelinus; CO = Cornuti; D = Dillenius; H = Hermann; LA = Lafitau; L = Linnaeus' *Hortus cliffortianus*; LT = Leat; LV = Linnaeus' *Viridarium cliffortianum*; MA = Martyn; MO = Morison; PE = Petiver; PL = Plukenet; PU = Plumier; RA = Ray; RO = Royen; S = Sloane; T = Tourenfort; V = Vaillant. Only those species considered by Linnaeus to be strictly New World will be evaluated. A star (\*) indicates when Gronovius and the additional reference(s) cited by Linnaeus are the only synonyms given in the first edition of *Species plantarum*. Those works published after 1739 or 1743, depending on the page in Gronovius, are not considered in this review.

*Acer negundo* - L  
*Acer rubrum* - CA, PL  
*Acrostichum areolatum* - PE\*  
*Acrostichum platyneuros* - PL  
*Actaea racemosa* - D  
*Adiantum pedatum* - CO  
*Ageratum altissimum* - L  
*Aletris farinosa* - PL\*  
*Amaryllis atamasca* - MO  
*Ambrosia trifida* - L  
*Anchusa virginiana* - MO, PL\*  
*Andromeda arborea* - CA\*  
*Andromeda mariana* - PL\*  
*Andromeda paniculata* - L, PL  
*Andropogon virginicum* - RO\*  
*Anemone virginiana* - RO  
*Annona muricata* - L, PL  
*Apocynum cannabinum* - PL  
*Aquilegia canadensis* - CO  
*Aralia spinosa* - L, LV  
*Arethusa bulbosa* - PL\*  
*Arethusa divaricata* - CA\*  
*Arethusa ophioglossoides*, L  
 PL  
*Aristolochia serpentaria* - CA,  
 PL  
*Arum triphyllum* - MO  
*Arum virginicum* - L\*  
*Asarum canadense* - CO  
*Asarum virginicum* - PL  
*Asclepias decumbens* - PE\*  
*Asclepias incarnata* - CO, L  
*Asclepias nivea* - D  
*Asclepias syriaca* - CO, L  
*Asclepias verticillata* - PE,

- PL\*  
*Ascyrum hypericoides* - PL,  
 RA  
*Aster divaricatus* - PL\*  
*Aster dumosus* - L  
*Aster ericoides* - D\*  
*Aster grandiflorus* - D  
*Aster novae-angliae* - H, L\*  
*Azalea lutea* - L  
*Baccharis halimifolia* - L  
*Bartsia coccinea* - L, MO  
*Bignonia radicans* - CA, L  
*Bupththalmum frutescens* - CA,  
 D, L  
*Bupththalmum helianthoides* - PL  
*Burmanna biflora* - L\*  
*Cacalia atriplicifolia* - PL  
*Callicarpa americana* - CA  
*Campanula perfoliata* - L, MO\*  
*Carduus virginianus* - MO  
*Cassia chamaecrista* - BR, L  
*Cassia ligustrina* - D, L  
*Ceanothus americanus* - CM, L  
*Celosia paniculata* - S  
*Celtis occidentalis* - RA\*  
*Cenchrus tribuloides* - MO  
*Cephalanthus occidentalis* - L  
*Cercis canadensis* - L  
*Chelone glabra* - L, T  
*Chelone hirsuta* - PL, RA\*  
*Chionanthus virginica* - L  
*Chrysogonum virginianum* - L  
*Cicuta bulbifera* - RA\*  
*Cicuta maculata* - MO, PL\*  
*Claytonia virginica* - PL  
*Clematis viorna* - D  
*Clitoria virginiana* - D\*  
*Commelina communis* - L  
*Convallaria racemosa* - L  
*Convolvulus repens* - PU\*  
*Coreopsis auriculata* - PL  
*Coreopsis verticillata* - PL,  
 V\*  
*Cornus florida* - L  
*Cracca virginiana* - L, PL\*  
*Crataegus coccinea* - L  
*Crotalaria sagittalis* - L, PL  
*Cucubalus stellatus* - RA\*  
*Cupressus distichia* - CA, L  
*Cuscuta americana* - S\*  
*Cynanchum suberosum* - D, L  
*Cyperus arundinacea* - MO, PL\*  
*Cyperus odoratus* - RO  
*Diodia virginiana* - L\*  
*Dioscorea villosa* - PL\*  
*Diospyros virginiana* - CA, L  
*Epigaea repens* - PL  
*Erigeron canadense* - L, MO  
*Eriocaulon decangulare* - PE,  
 PL\*  
*Eriophorum virginicum* - MO,  
 PL\*  
*Eryngium aquaticum* - PL\*  
*Eryngium foetidum* - L  
*Eupatorium aromaticum* - PL  
*Eupatorium coelestinum* - D  
*Eupatorium perfoliatum* - L  
*Eupatorium purpureum* - CO  
*Eupatorium scandens* - L, PL\*  
*Euphorbia polygonifolia* - RA\*  
*Euonymus americanus* - PL  
*Fagus pumila* - CA, PL\*  
*Fraxinus americana* - CA\*  
*Fumaria cucullaria* - L  
*Galium bermudense* - PL, RA\*  
*Gentiana saponaria* - CA, MO\*  
*Geranium carolinianum* - D\*  
*Geranium maculatum* - D\*  
*Gerardia flava* - RA  
*Gerardia pedicularia* - PL  
*Gerardia purpurea* - PL, RA\*  
*Geum virginianum* - H, L\*  
*Gleditsia triacanthos* - L  
*Glycine apios* - CO, L  
*Glycine comosa* - PE\*  
*Glycine tomentosa* - D\*  
*Gnaphalium plantaginifolium* -  
 PL\*  
*Gnaphalium purpureum* - D, RO  
*Hamamelis virginiana* - PL\*  
*Hedera quinquefolia* - CO, L  
*Hedysarum canescens* - L  
*Hedysarum paniculatum* - PL\*  
*Helenium autumnale* - L, PL  
*Helianthus angustifolius* - PE\*  
*Helianthus atrorubens* - D\*  
*Heuchera americana* - L  
*Hibiscus moscheutos* - L  
*Hieracium venosum* - PL, RA\*  
*Houstonia caerulea* - L  
*Houstonia purpurea* - RA  
*Hydrophyllum virginianum* - L  
*Hyssopus nepetoides* - L, LV  
*Iris verna* - PL\*  
*Iva frutescens* - L  
*Juglans nigra* - L  
*Juniperus virginiana* - L  
*Kalmia angustifolia* - PL\*  
*Kalmia latifolia* - PL  
*Laurus benzoin* - L  
*Laurus borbonia* - CA, L\*  
*Laurus indica* - L  
*Laurus sassafras* - L, PL  
*Lechea minor* - RA\*  
*Ligusticum scothieum* - L  
*Limodorum tuberosum* - MA\*  
*Liquidambar styraciflua* - CA,  
 L  
*Liriodendron tulipifera* - H, L  
*Lithospermum virginianum* - MO\*



- Lobelia cardinalis* - L  
*Lobelia cliffortiana* - L  
*Lonicera marilandica* - CA, RA\*  
*Lonicera symphoricarpos* - D, L  
*Ludwigia alternifolia* - L  
*Lupinus perennis* - MO, RO\*  
*Lycopodium alopecuroides* - L,  
MO  
*Lysimachia quadrifolia* - PE  
*Magnolia virginiana* - L\*  
*Magnolia virginiana* var.  
*acuminata* - CA\*  
*Magnolia virginiana* var.  
*foetida* - CA  
*Medeola virginiana* - PL\*  
*Medicago virginica* - PL\*  
*Melothria pendula* - L  
*Menispermum canadense* - L  
*Menispermum virginicum* - D\*  
*Mitchella repens* - CA, PE,  
PL\*  
*Mollugo verticillata* - PL  
*Monarda ciliata* - MO, PL\*  
*Monarda punctata* - L  
*Monotropa uniflora* - CA, MO  
*Myosotis virginiana* - PL\*  
*Myrica asplenifolia* - L  
*Myrica cerifera* - CA, L, PL\*  
*Nepeta virginica* - L  
*Nyssa aquatica* - CA, L  
*Obolaria virginica* - L, PL  
*Oldenlandia uniflora* - PL\*  
*Onoclea sensibilis* - L, PL  
*Ophiorrhiza mitreola* - L\*  
*Orchis ciliaris* - RO  
*Orobanche uniflora* - PL\*  
*Orobanche virginiana* - MO, RA\*  
*Osteospermum uvedalia* - L  
*Oxalis stricta* - T  
*Panax quinquefolius* - LA, V  
*Panax trifolius* - PL, V\*  
*Panicum capillare* - S\*  
*Parthenium integrifolium* - D,  
L  
*Passiflora lutea* - L  
*Phlox glaberrima* - D, L\*  
*Physalis viscosa* - D, L\*  
*Phytolacca americana* - L  
*Pinus balsamea* - PL  
*Pinus taeda* - PL  
*Plantago virginica* - MO, PL,  
RA\*  
*Platanus occidentalis* - CA, L  
*Poa flava* - PE\*  
*Podophyllum peltatum* - CA, L  
*Polygala senega* - RA\*  
*Polygala verticillata*, PL,  
RA\*  
*Polygonum sagittatum* - L, LA  
*Polygonum virginianum* - L  
*Pontederia cordata* - L  
*Prenanthes alba* - L  
*Pulmonaria virginica* - MO, PL\*  
*Pyrola maculata* - PL  
*Quercus alba* - CA\*  
*Quercus nigra* - CA, RA\*  
*Quercus phellos* - CA, RA  
*Quercus prinus* - CA, L  
*Quercus rubra* - CA, PL  
*Ranunculus abortivus* - H  
*Renalemia usneoides* - L, PE, S  
*Rhus copallinum* - PL  
*Rhus glabra* - D, L  
*Rhus radicans* - D, L  
*Rhus toxicodendron* - T  
*Rhus vernix* - D, L  
*Robinia pseudoacacia* - L  
*Rudbeckia laciniata* - CO, L,  
LV  
*Rudbeckia purpurea* - CA, PL  
*Ruellia strepens* - D, L\*  
*Salvia urticifolia* - MO\*  
*Sanguinaria canadensis* D, L  
*Sanicula canadensis* - T  
*Sanicula marilandica* - RA  
*Sarothra gentianoides* - PL\*  
*Sarracenia flava* - CA, L  
*Sarracenia purpurea* - CA, L  
*Satureja origanoides* - MO, PL\*  
*Satureja virginiana* - H, L  
*Saururus cernuus* - L  
*Saxifraga pensylvanica* - D  
*Scandix procumbens* - MO\*  
*Schwalbea americana* - PL\*  
*Scirpus spadiceus* - S\*  
*Scrophularia marilandica* - RA\*  
*Scutellaria hyssopifolia* - PE\*  
*Scutellaria integrifolia* - PL,  
RA\*  
*Scutellaria lateriflora* - MO\*  
*Senecio aureus* - MO, RA\*  
*Serratula glauca* - D  
*Serratula spicata* - D  
*Serratula squarrosa* - D  
*Silene antirrhina* - D\*  
*Silphium asteriscus* - D, L\*  
*Silphium helianthoides* - PL\*  
*Sison canadense* - L  
*Sisyrinchium bermudiana* - D, L  
*Sium rigidius* - MO\*  
*Smilax lanceolata* - L  
*Smilax laurifolia* - CA\*  
*Smilax pseudo-china* - L  
*Smilax sarsaparilla* - L  
*Smyrniolum aureum* - PL  
*Solidago canadensis* - L  
*Solidago sempervirens* - H  
*Sophora tinctoria* - PL\*  
*Spiraea opulifolia* - L  
*Spiraea trifoliata* - L, PL

*Tetragonotheca helianthoides* - D\*

*Tiarella cordifolia* - L

*Tradescantia virginiana* - L

*Trifolium reflexum* - PL\*

*Trillium sessile* - CA, PL\*

*Vaccinium stamineum* - PL\*

*Valeriana locusta* var. *radiata* - RA\*

*Verbena urticifolia* - L

*Verbesina alba* - D, L

*Veronica virginica* - L\*

*Viola palmata* - PL\*

*Viola pedata* - PE, PL\*

*Yucca filamentosa* - MO, PL\*

is located in Sweden and in the British Museum (Natural History) in London. These collections are not considered in this listing. Many of these species are based, in part, upon Clayton material. Authentic Clayton specimens are to be sought at the British Museum (Natural History).

A star (\*) is added to those species which are also based on Clayton collections cited by Gronovius.

When Linnaeus proposed species in the first edition of *Species plantarum* he used, to a significant degree, information already published by others who preceded him. During an examination of the Linnaean references relating to the State of Maryland published in the first two editions of his book, it was discovered that Linnaeus used the herbarium collections at Oxford to augment his understanding of temperate North American botany to a degree not previously realized. The knowledge which Linnaeus gained at Oxford was almost immediately expressed in Gronovius' *Flora virginica* which Linnaeus worked on soon after his departure from England in the late summer of 1736. This is probably equally true for regions in North America other than Maryland. It is not the purpose of this review to attempt a combined examination of this problem using both Linnaeus' published works and the Sherardian and Dillenian herbaria at the University of Oxford. However, the following list may prove helpful for those who are investigating potential lectotypes for species which might be found at Oxford. This in no way should be construed as a statement of affirmation that such authentic material is actually present. It should be remembered that other Linnaean material

*Acrostichum areolatum*\*  
*Acrostichum platyneuros*\*  
*Actaea spicata* var. *alba*  
*Andromeda arborea*\*  
*Annona glabra*  
*Annona triloba*  
*Asarum virginicum*\*  
*Asclepias amoena*  
*Asclepias decumbens*\*  
*Asclepias variegata*  
*Ascyrum villosum*  
*Aster miser*  
*Aster mutabilis*  
*Astragalus carolinianus*  
*Baccharis foetida*\*  
*Bignonia caerulea*  
*Bignonia sempervirens*  
*Carduus altissimus*  
*Carduus virginianus*\*  
*Cissampelos smilacina*  
*Clinopodium rugosum*  
*Clitoria mariana*  
*Clitoria virginiana*\*  
*Convallaria stellata*  
*Convolvulus carolinus*  
*Conyza bifrons* var. *flosculosa*  
*Conyza linifolia*  
*Coreopsis auriculata*\*  
*Cyperus arundinacea*\*  
*Dioscorea villosa*\*  
*Eupatorium hyssopifolium*  
*Euphorbia maculata*  
*Galium bermudense*\*  
*Glycine tomentosa*\*  
*Helianthus angustifolius*\*  
*Hieracium venosum*\*  
*Horminum virginicum*  
*Hypericum setosum*\*  
*Ipomoea carolina*  
*Ipomoea lacunosa*  
*Ipomoea tamnifolia*  
*Iris versicolor*  
*Lonicera marilandica*\*  
*Lycopodium carolinianum*

*Magnolia virginiana*  
     var. *acuminata*\*  
*Magnolia virginiana*  
     var. *foetida*\*  
*Magnolia virginiana*  
     var. *grisea*  
*Magnolia virginiana*  
     var. *tripetala*  
*Medicago virginica*\*  
*Monarda ciliata*\*  
*Orobanche uniflora*\*  
*Pancreatium carolinianum*  
*Phaseolus helvulus*  
*Philadelphus inodorus*  
*Phlox pilosa*  
*Phlox setacea*  
*Pistacia simaruba*  
*Poa flava*\*  
*Polemonium rubrum*  
*Polygala cruciata*\*  
*Polypodium virginianum*  
*Prenanthes alba*\*  
*Rhexia mariana*  
*Ribes oxycanthoides*  
*Sanicula marilandica*\*  
*Scandix procumbens*\*  
*Schwalbea americana*\*  
*Serratula glauca*\*  
*Silphium helianthoides*\*  
*Sloanea emarginata*  
*Smilax bona-nox*  
*Solanum nigrum*  
     var. *virginicum*  
*Solidago caesia*  
*Thalictrum cornutii*  
*Tilia americana*\*  
*Trifolium comosum*  
*Triosteum angustifolium*\*  
*Triosteum perfoliatum*  
*Valeriana locusta*  
     var. *radiata*\*  
*Viscum rubrum*  
*Yucca filamentosa*\*

Of the 81 entities that might have authentic material found in the Sherardian and Dillenian herbaria at the University of Oxford, 33 are also based on Clayton specimens. Three major pre-Linnaean authors have major sets of their collections at Oxford. Of the three, Catesby, Dillenius and Morison, Catesby and Dillenius are the only authors or herbaria Linnaeus seems to have consulted (both of these men have their collections in the Sherardian Herbarium). The

following 12 species cited by Linnaeus might have voucher specimens at Oxford to go with the illustrations published by Catesby:

*Annona glabra*  
*Annona triloba*  
*Bignonia caerulea*  
*Bignonia sempervirens*  
*Cissampelos smilacina*  
*Ipomoea carolina*  
*Magnolia virginiana*  
     var. *tripetala*  
*Pancreatium carolinianum*  
*Philadelphus inodorus*  
*Pistacia simaruba*  
*Sloanea emarginata*  
*Viscus rubrum*

Dillenius specimens should be consulted for the following species which should be considered in addition to the published illustrations when proposing lectotypes. A total of 19 species are listed:

*Asclepias amoena*  
*Asclepias variegata*  
*Aster miser*  
*Astragalus carolinianus*  
*Carduus altissimus*  
*Clinopodium rugosum*  
*Convolvulus carolinus*  
*Eupatorium hyssopifolium*  
*Horminum virginicum*  
*Ipomoea lacunosa*  
*Ipomoea tamnifolia*  
*Iris versicolor*  
*Lycopodium carolinianum*\*  
*Phaseolus helvulus*  
*Polemonium rubrum*  
*Ribes oxycanthoides*  
*Solidago caesia*  
*Solanum nigrum*  
     var. *virginicum*  
*Triosteum perfoliatum*

Morison (and in the case of most temperate North American species, this includes Bobart) the following species should be considered in addition to the published illustrations. A total of 5 species are listed below.

*Actaea spicata* var. *alba*  
*Convallaria stellata*



Eupatorium hyssopifolium  
Polypodium virginianum  
Thalictrum cornutii

Other authors occasionally sent specimens to Sherard and Dillenius, or these two men annotated specimens they received from various naturalists, with polynomials that could have been observed when Linnaeus examined the Oxford collections. Polynomials published by Ray, Plukenet and Petiver are on such specimens. The following Linnaean species have polynomials proposed by these men given in synonymy, and such names may be on specimens found in the Sherardian and Dillenian herbaria at the University of Oxford. PE= Petiver; PL= Plukenet; R= Ray.

Asclepias variegata - PL  
Ascyrum villosum - PL  
Aster mutabilis - PL  
Bignonia sempervirens - PL, R  
Clinopodium rugosum - PL, R  
Clitoria mariana - PE  
Conyza bifrons var. floscula  
- PL  
Conyza linifolia - PL  
Eupatorium hyssopifolium -  
PL, R  
Euphorbia maculata - PL  
Horminum virginicum - PL  
Magnolia virginiana  
var. grisea - R  
Phlox pilosa - PL, R  
Phlox setacea - PL  
Polypodium virginianum - PE,  
R  
Rhexia mariana - PL  
Ribes oxycanthoides - PL  
Smilax bona-nox - PL  
Solidago caesia - R  
Trifolium comosum - PE

For Linnaeus, the botanical explorations that occurred in temperate North America prior to 1753 were significant to him. He never saw the New World himself and had to rely upon the efforts of others to provide him with information. This came in the form of dried herbarium specimens, seeds and fruits that resulted in culti-

vated plants he could examine, and publications he could read and study. Many of the herbarium specimens seen by Linnaeus were gathered by John Clayton and Peter Kalm. Of the 889 species and varieties described by Linnaeus in the first edition of *Species plantarum* in 1753, at least 586 entities, or 66%, were based on their collections. This includes 551 species for which there are Clayton specimens, 205 species for which there are Kalm specimens, and 170 species which were gathered by both men. Of the remaining 303 species, Linnaeus has material (mostly garden specimens or collections which cannot be determined as to collector) for some 250 of those species. The following species do not seem to have obvious specimens immediately available to Linnaeus. A star (\*) indicates those species which are not illustrated.

Annona glabra  
Arnica maritima\*  
Asclepias amoena  
Asclepias variegata  
Aster miser  
Aster mutabilis  
Astragalus carolinianus  
Bignonia caerulea  
Bignonia sempervirens  
Carduus altissimus  
Cissampelos smilacina  
Clinopodium rugosum  
Clitoria mariana\*  
Convallaria stellata  
Convolvulus carolinus  
Conyza bifrons  
var. flosculosa  
Conyza linifolia  
Eupatorium hyssopifolium  
Euphorbia maculata  
Gomphrena interrupta\*  
Gomphrena serrata\*  
Guilandina dioica\*  
Holesteum succulentum\*  
Horminum virginicum  
Hypericum lasianthus  
Ipomoea carolina  
Ipomoea lacunosa  
Ipomoea tamnifolia  
Iris versicolor

*Lilium camschatcense*\*  
*Lycopodium carolinianum*  
*Magnolia virginiana*  
     var. *grisea*\*  
*Magnolia virginiana*  
     var. *tripetala*  
*Othonna cinneraria*\*  
*Pancratium carolinianum*  
*Phaseolus helvulus*  
*Philadelphus inodorus*  
*Phlox pilosa*  
*Phlox setacea*  
*Pistacia simaruba*  
*Polemonium rubrum*  
*Polypodium virginianum*  
*Prenanthes altissima*  
*Rhexia mariana*  
*Ribes oxycanthoides*  
*Sloanea emarginata*  
*Smilax bona-nox*  
*Solanum nigrum*  
     var. *virginicum*  
*Solidago caesia*  
*Thalictrum cornutii*  
*Trifolium comosum*\*  
*Triosteum perfoliatum*  
*Viscum rubrum*

### CONCLUSIONS

Linnaeus left an impressive record of accomplishments when he died in 1778. His impact has extended far beyond his own life time, and today, the works of Carl Linnaeus are as critical to botanists now as they were at the time they were published. In the present review of just one publication -- the first edition of *Species plantarum* -- it can be seen that not only is this publication itself important, but the basis upon which it was established reflects Linnaeus' premier position within the botanical community. This becomes obvious when one realizes that Linnaeus had access, directly through specimens and indirectly through the literature, to a large percentage of

the world's flora in 1753. No doubt Linnaeus was a man of tremendous industry. He had the time and opportunity to work on projects he deemed important. He had the support of a large number of his colleagues, although many did not accept his general views as expressed in his sexual system of classification. Linnaeus revolutionized systematic botany by his consistent use of binomials. Not only did Linnaeus make it simpler to index names -- as was his intention -- he also made it more convenient for people of lesser intellect to remember scientific names.

What can be seen from this review of the temperate North American flora as reported in 1753 by Linnaeus is that he depended upon a great number of people to provide him with descriptions, illustrations, seeds and specimens. His place in the history of science is well established and shall not be diminished with time. That position does rest, however, upon the energies and even the lives of a host of men and women willing to face the unknown to discover the unseen so that he might inform the world of the existence of new species of plants. Time has not changed that fact. Today, we too fully depend upon the efforts of the many past generations of naturalists for our understanding of the living world. It is hoped that this review will remind the modern plant taxonomist that the history of systematic botany began long before 1753 and the first edition of *Species plantarum*.



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